

Service Manual for L1 and L2

Nokia Lumia 900

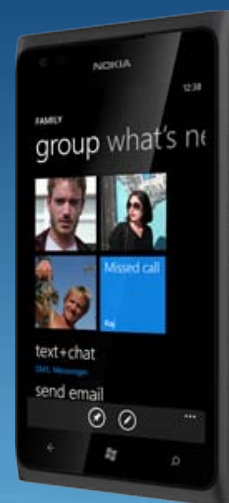
RM-808

Key features

- Windows Phone Mango Commercial Release 2 OS
- Large 4.3" AMOLED ClearBlack screen
- First Nokia smartphone with 4G LTE
- Headturning design and high capacity battery

Version 1.0

Check the repair policy before performing any mechanical repair on Service Level 1&2!



Exploded view



More

Disassembly steps



More

Disassembly video



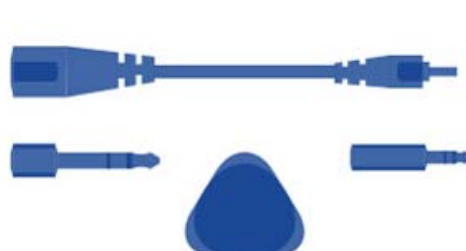
More

Assembly hints



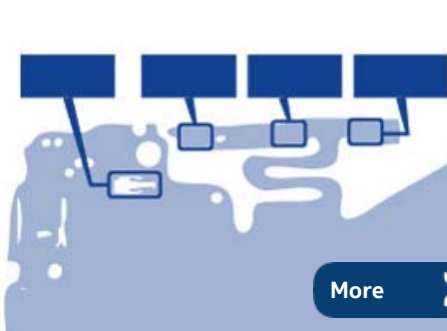
More

Service devices



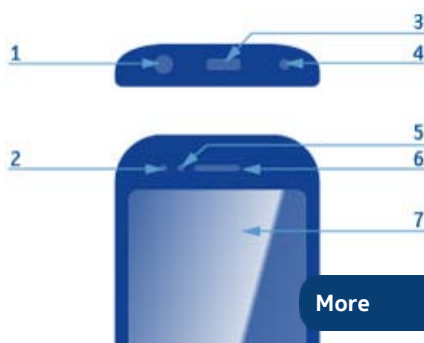
More

Solder components



More

Product controls and interfaces



More

Service concept

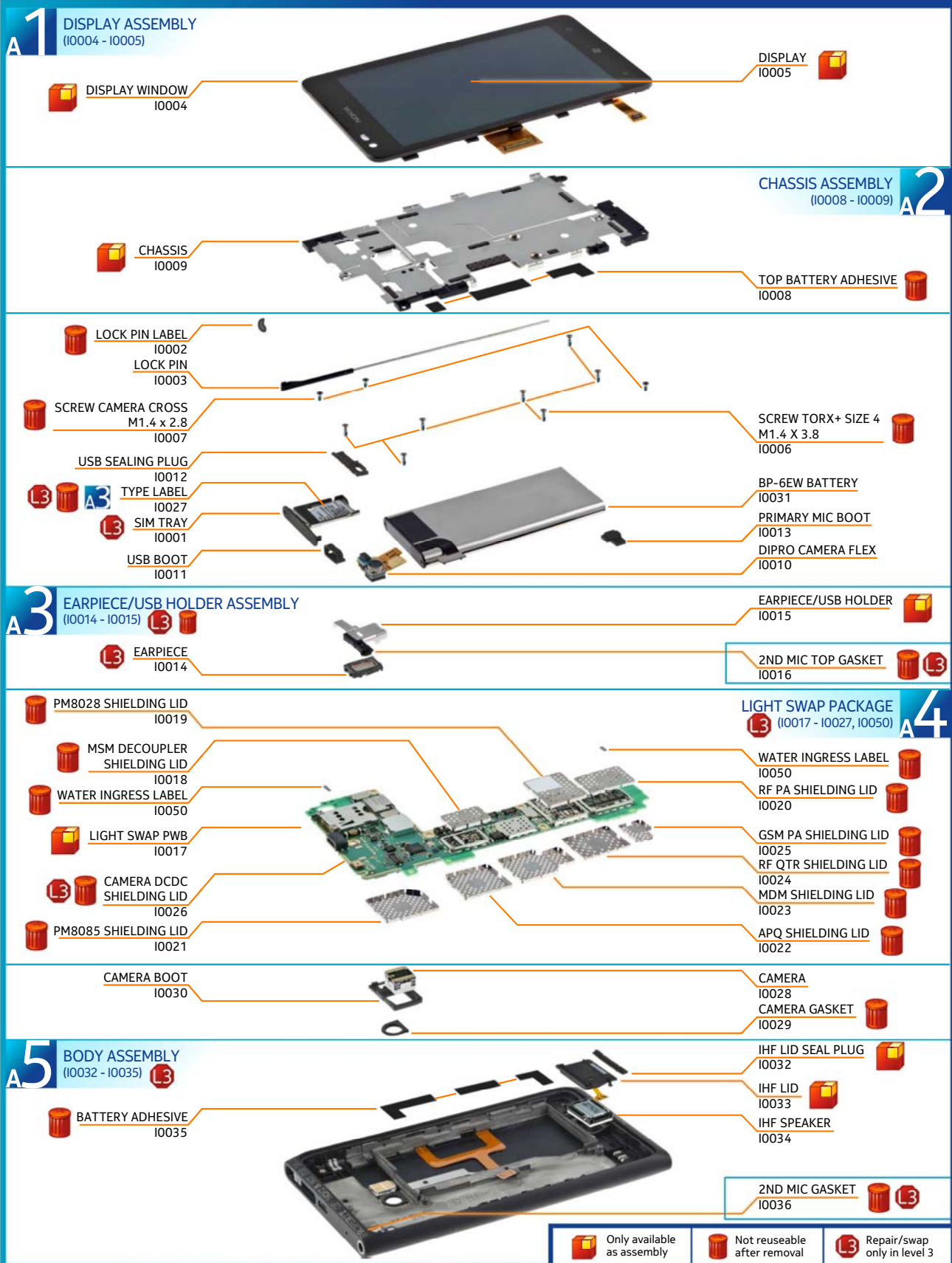


More

Phone reset



More

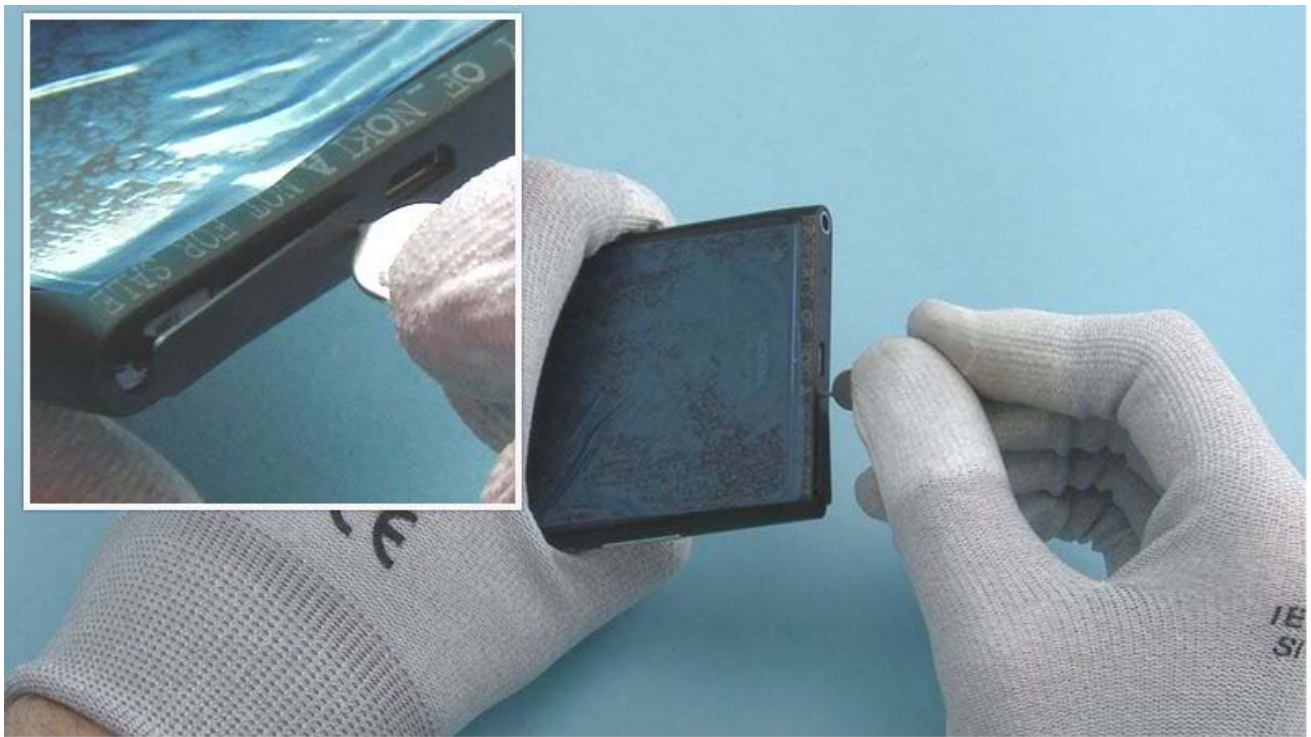




For disassembling you need the Nokia Standard Toolkit version 2. You will also need the SIM door key, the camera removal tool SS-210 and the unibody opening tool SS-282.



Protect the DISPLAY WINDOW with protective film.



Open the SIM TRAY by inserting the SIM door key to the hole in the release door.



Pull out and remove the SIM TRAY.



Remove the LOCK PIN LABEL with tweezers. Do not use it again. Discard it.



Withdraw the LOCK PIN with the shown tweezers. Be careful not to damage the LOCK PIN or the BODY ASSEMBLY.



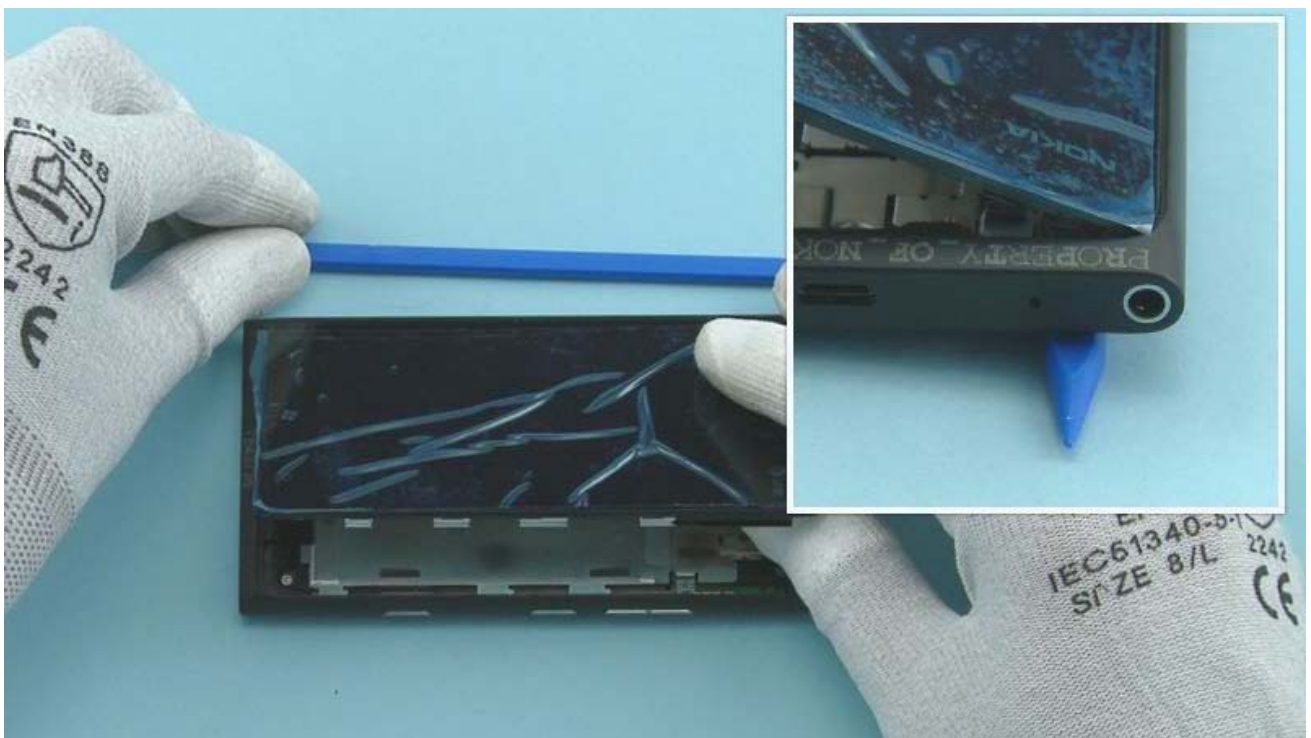
Insert the unibody opening tool SS-282 to the LOCK PIN hole and lever up the top right corner of the DISPLAY ASSEMBLY. Be careful not to damage the BODY ASSEMBLY or the DISPLAY ASSEMBLY.



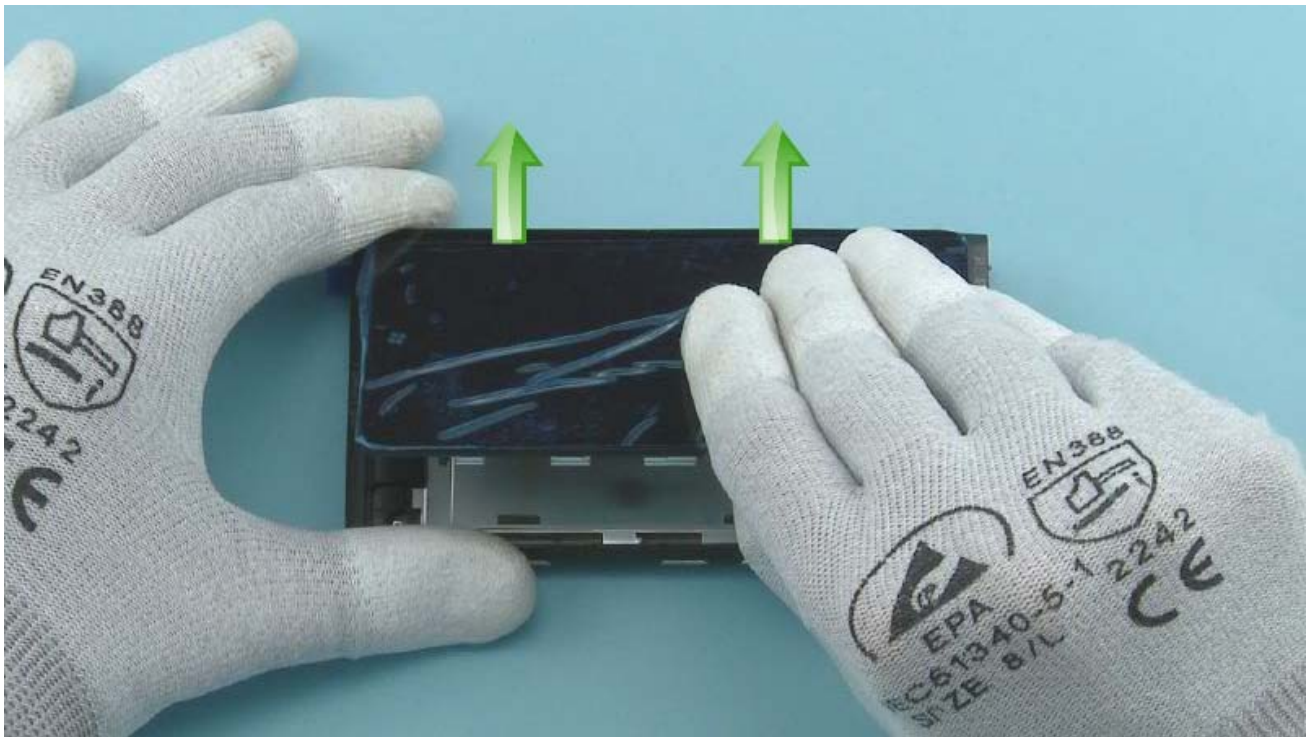
Release the right side of the DISPLAY ASSEMBLY by opening the two shown clips with the SRT-6.



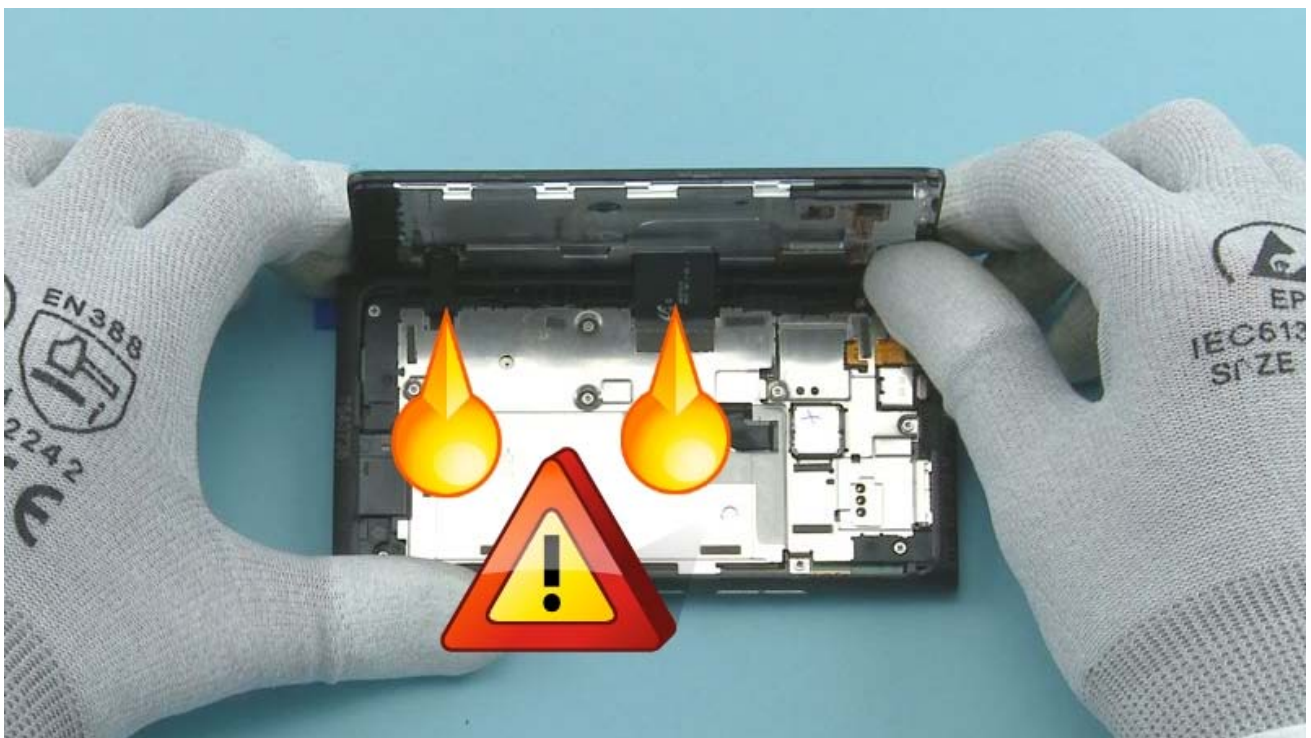
Lift up the right side of the DISPLAY ASSEMBLY.



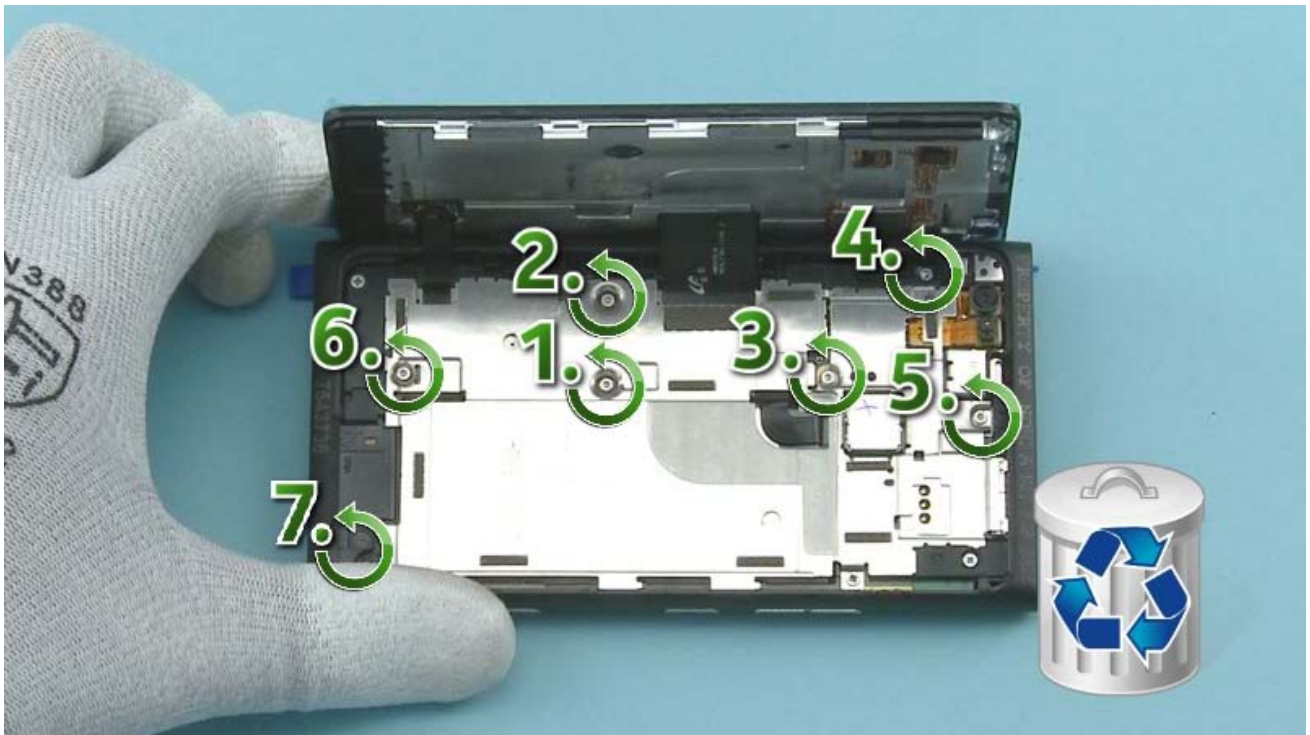
To get access to all of the screws, place the SS-93 under the left side of the device.



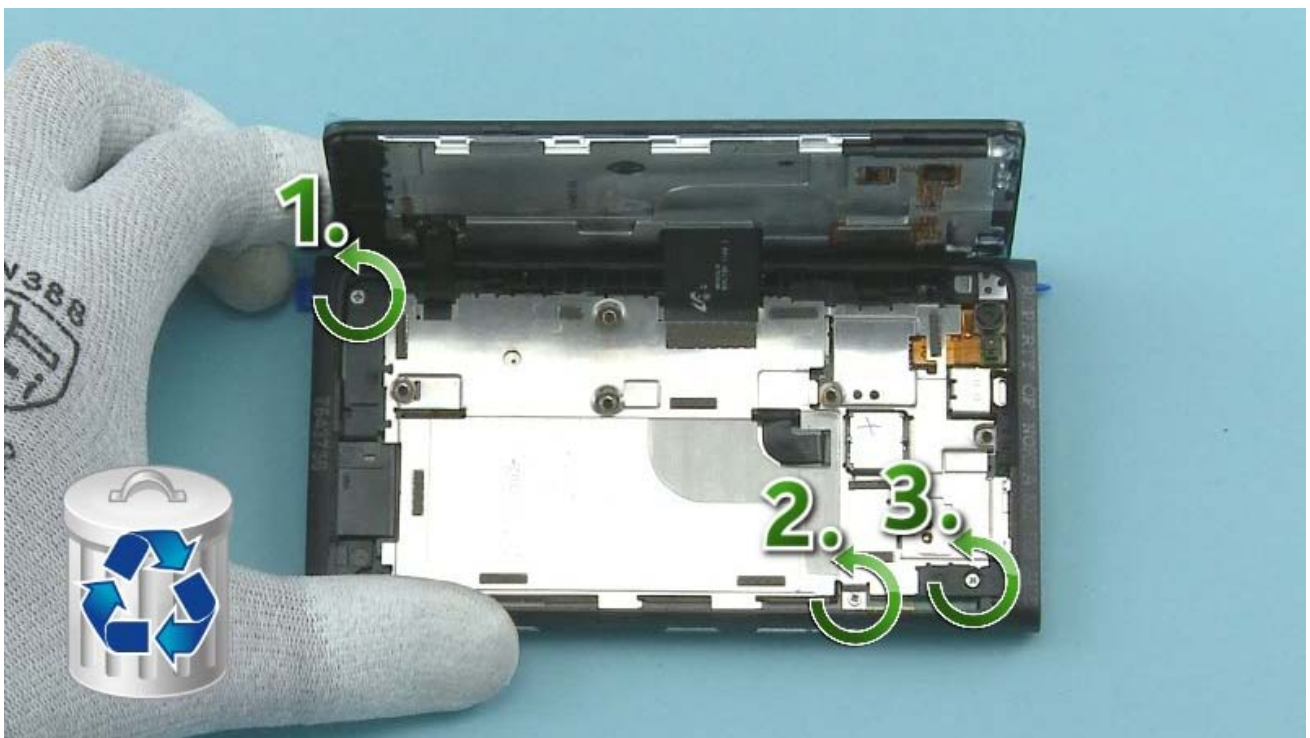
Then lift the left side of the DISPLAY ASSEMBLY over the left edge of the BODY ASSEMBLY.



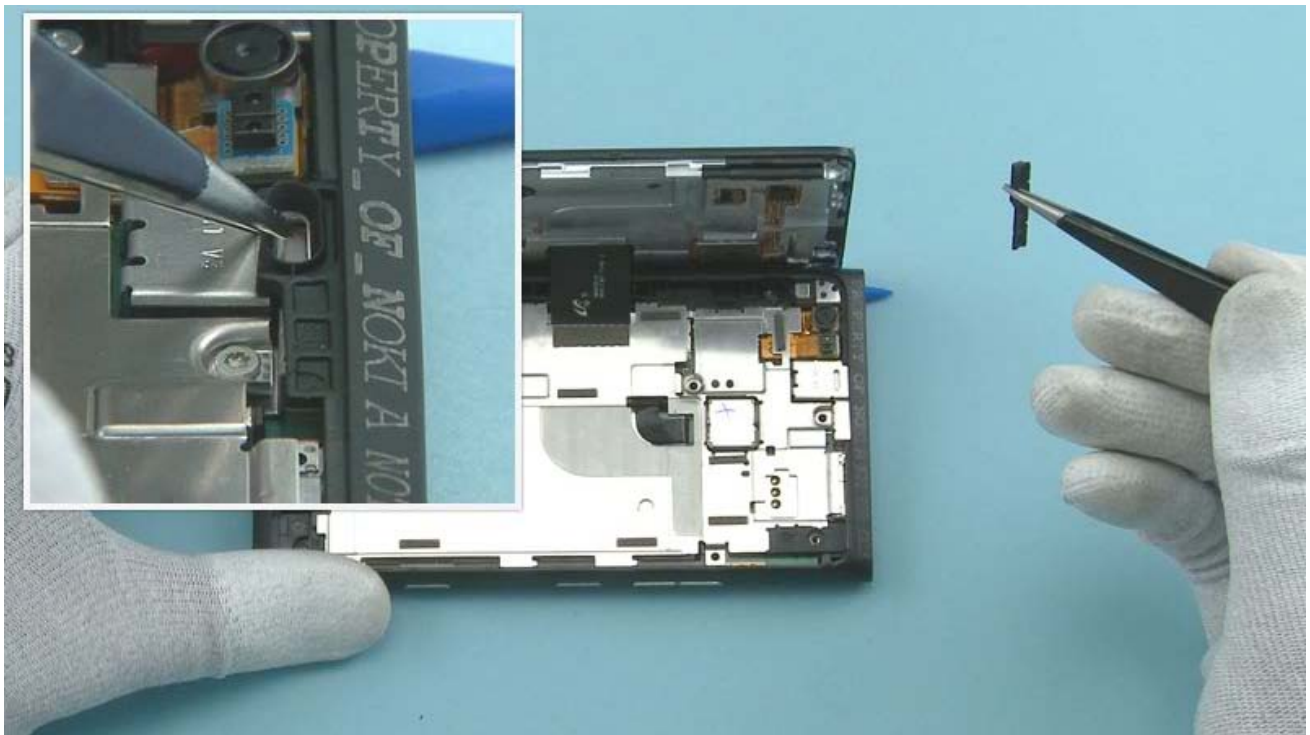
Flip open the DISPLAY ASSEMBLY. Be careful not to damage the UI FLEX or the DISPLAY FLEX.



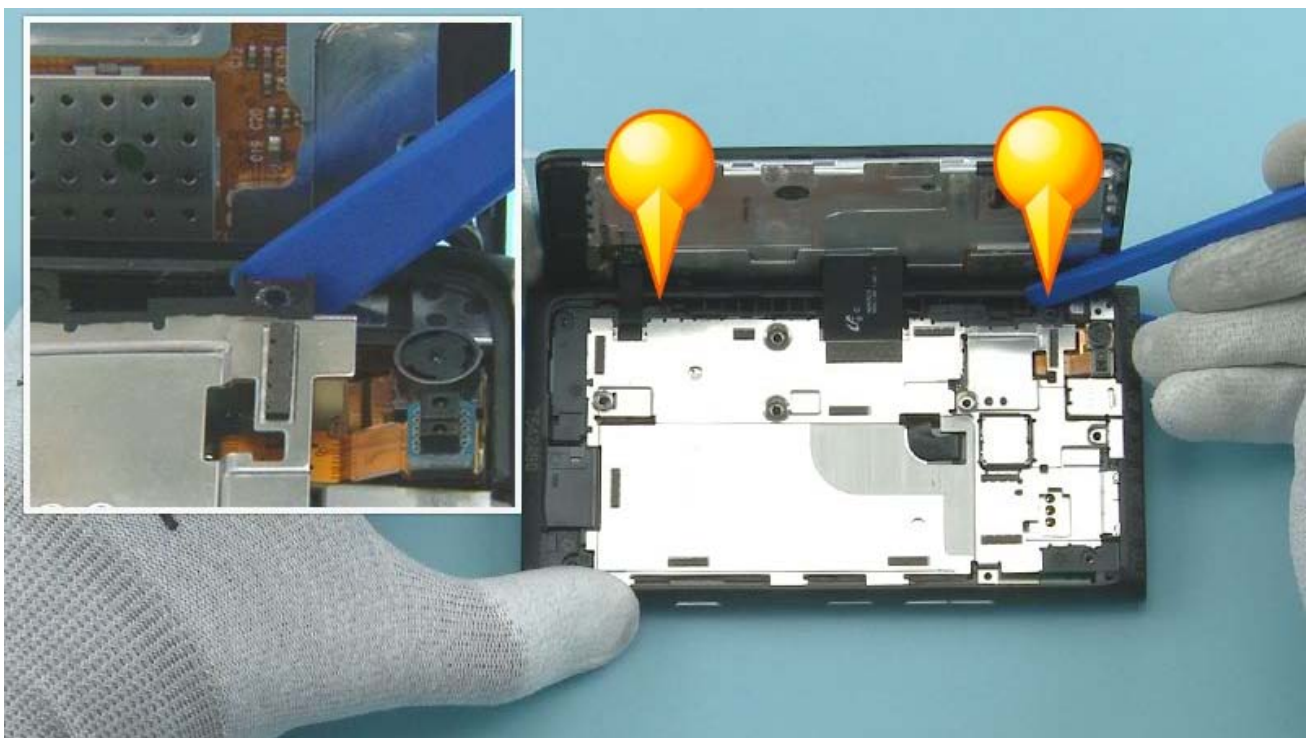
Unscrew the seven TORX+ size 4 screws in the order shown. Do not use them again. Discard them.



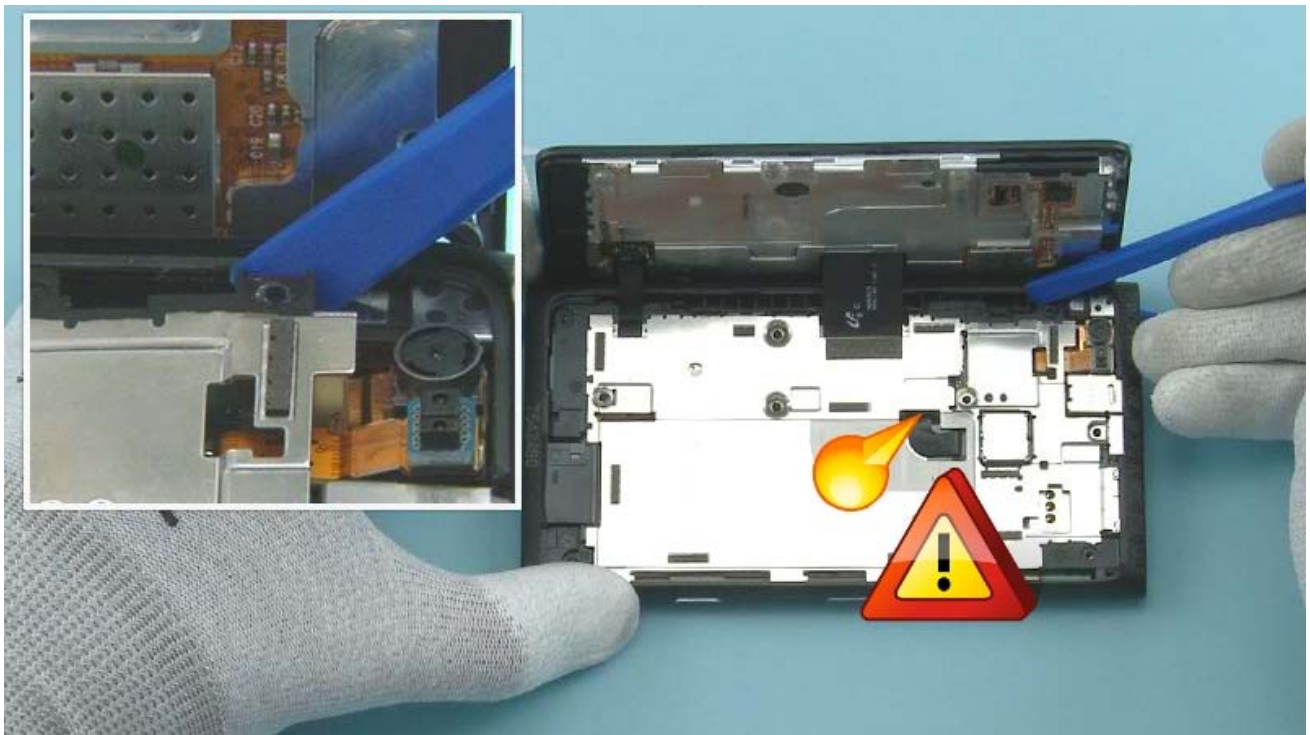
Unscrew the three camera cross screws with a camera cross screwdriver in the order shown. Do not use them again. Discard them.



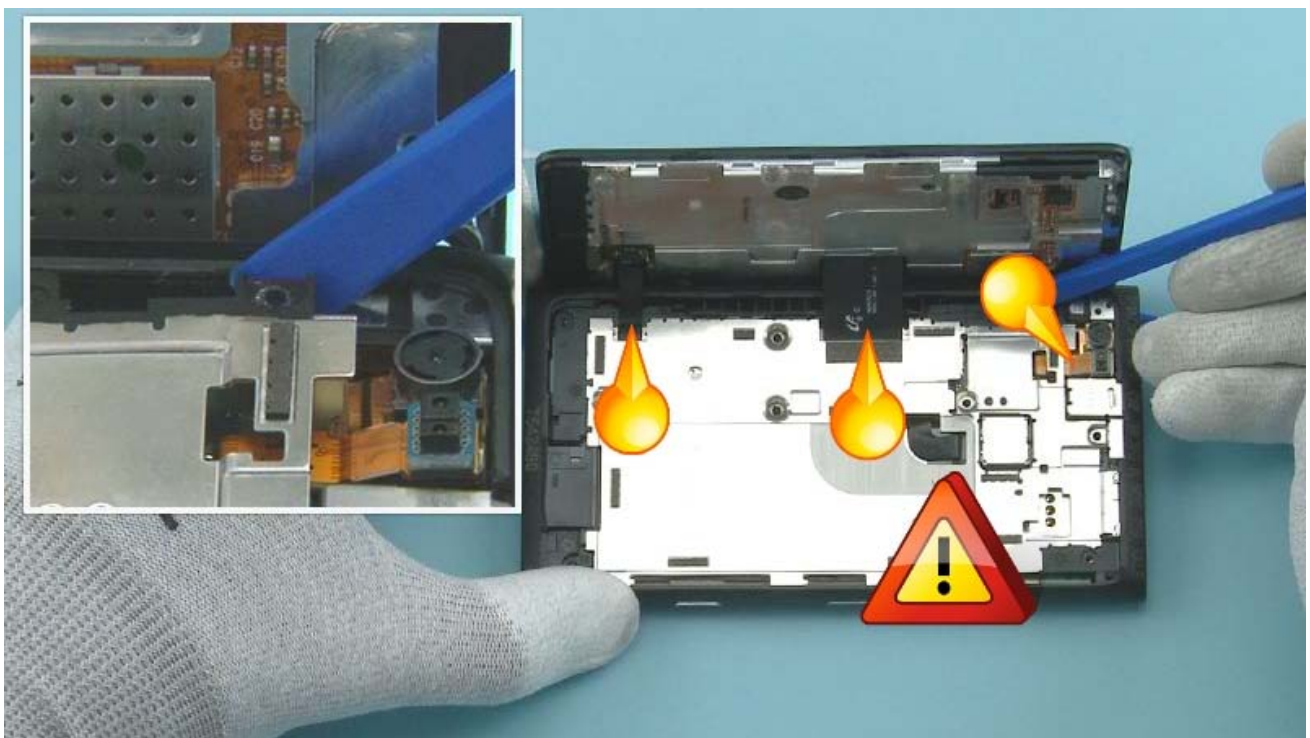
Remove the USB SEALING PLUG with tweezers.



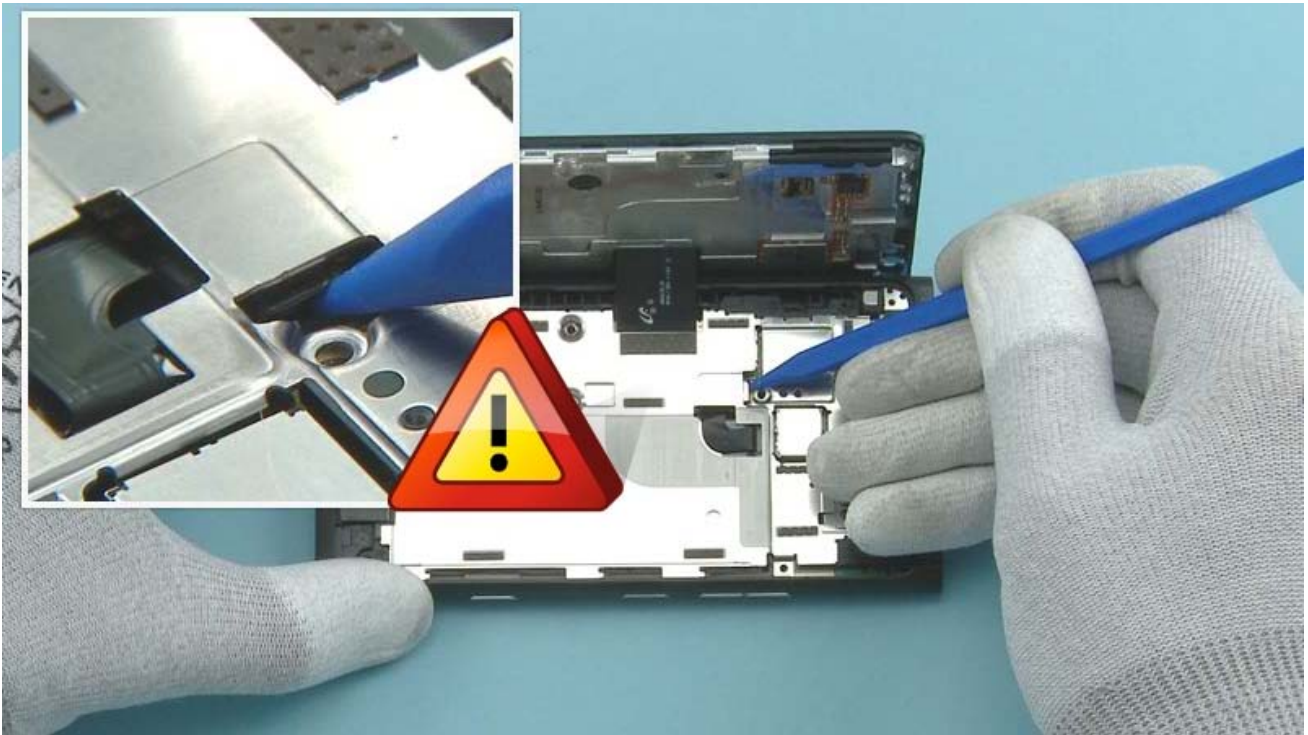
Release the left side of the CHASSIS from the two shown places with the SS-93.



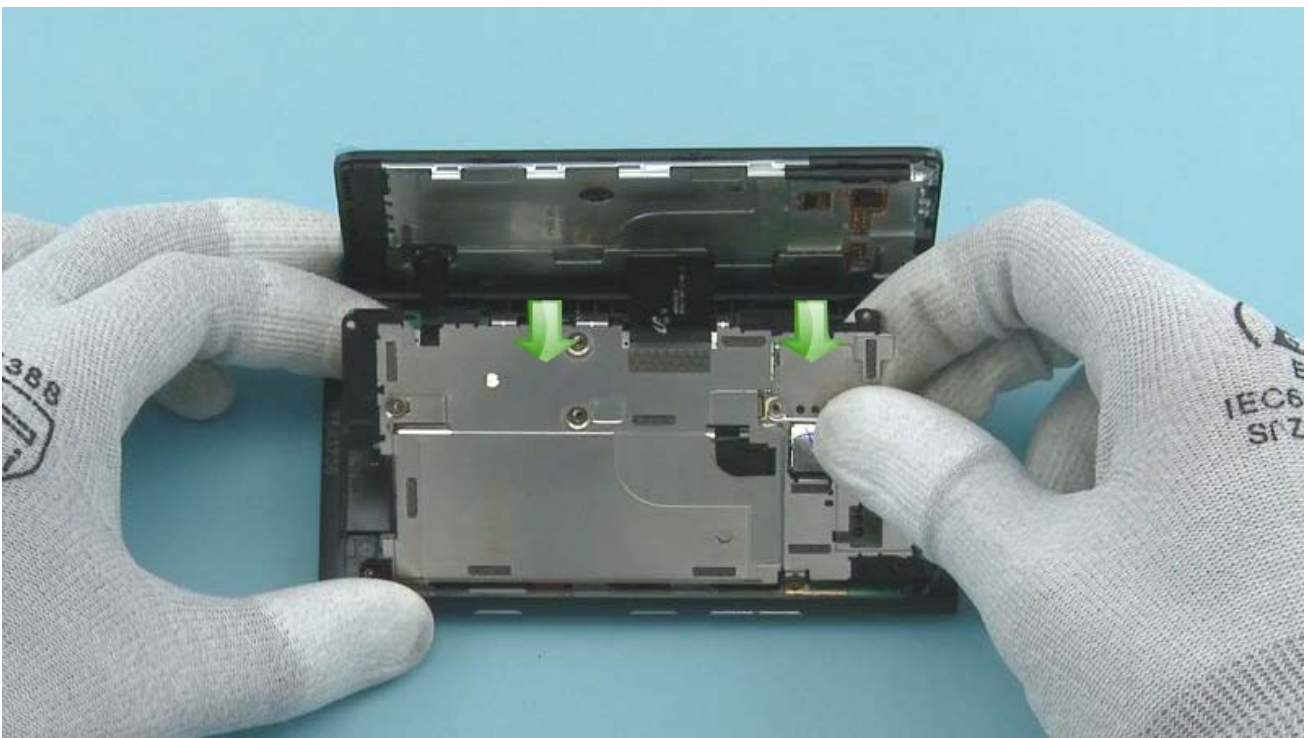
Note that the BATTERY is still connected so be careful not to cause a short circuit.



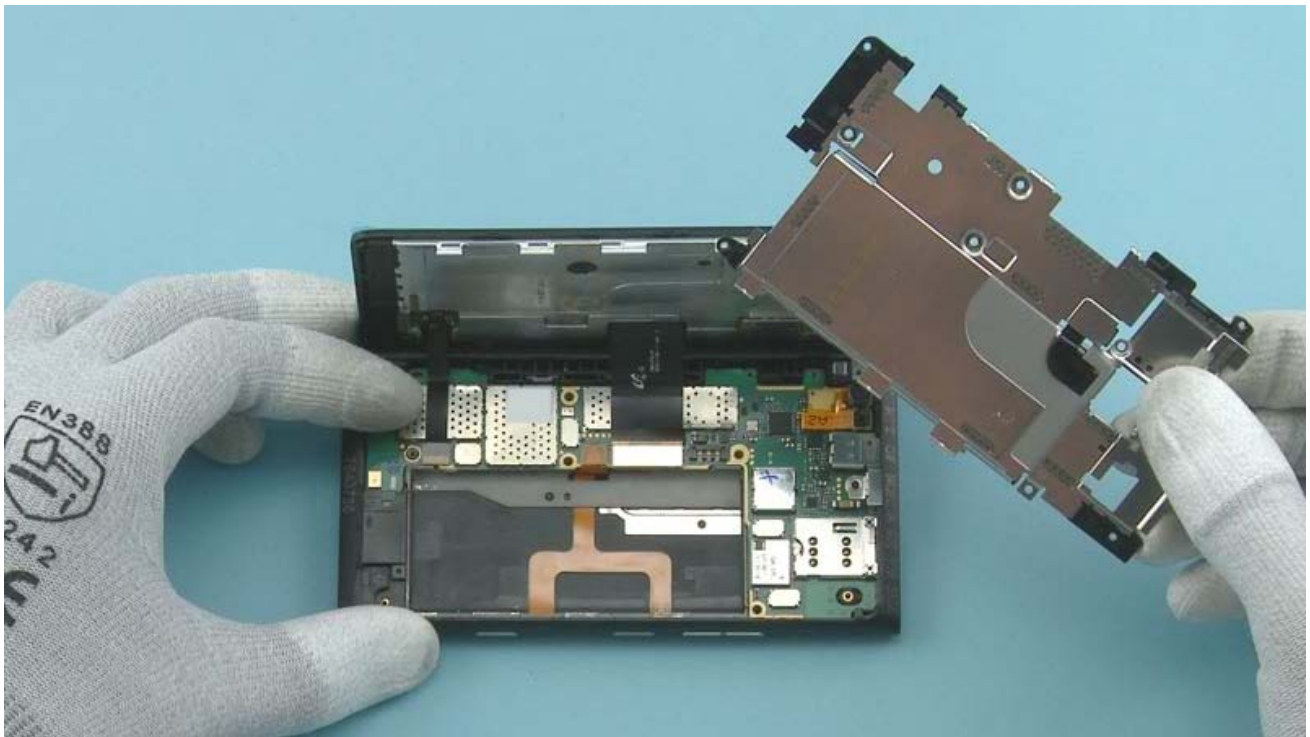
Be careful not to damage the flexes while releasing the CHASSIS.



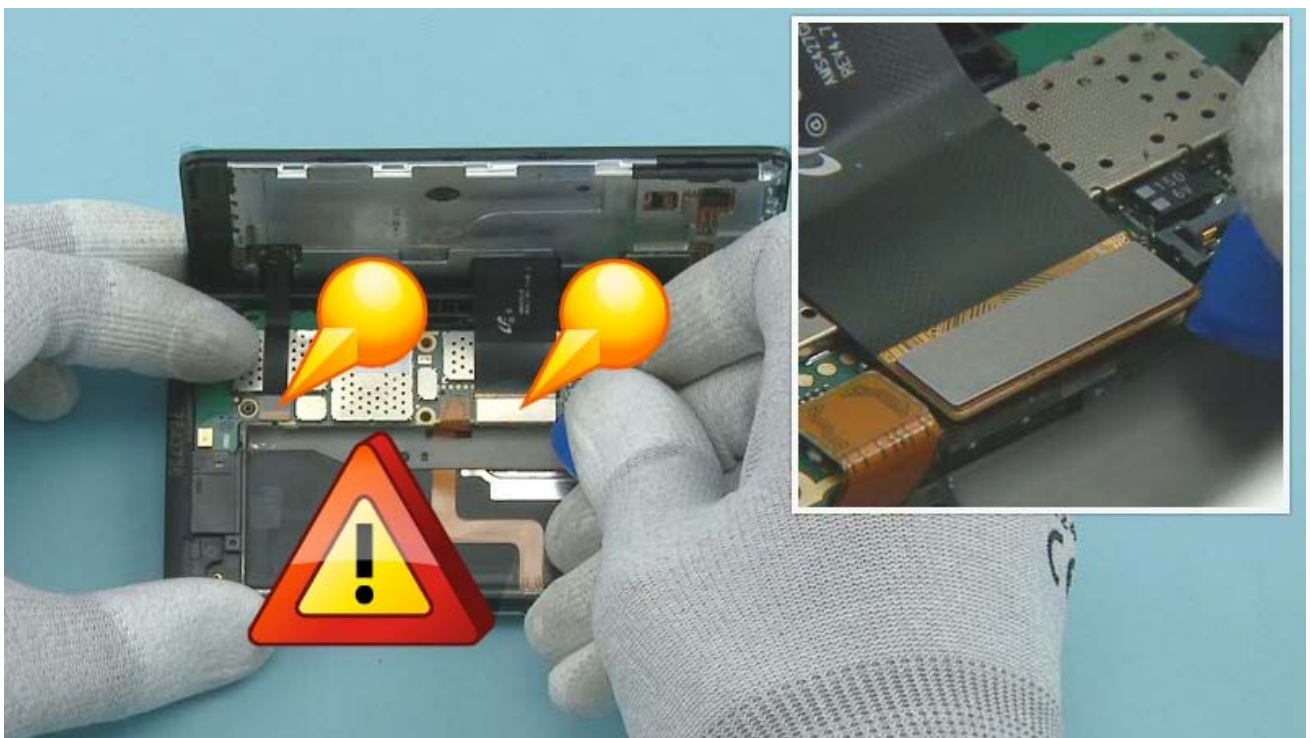
Insert the sharp end of the SS-93 to the shown hole to disconnect the battery. Be careful not to damage the connector or any components nearby.



Note that the BATTERY is taped to the CHASSIS. Lift up the LEFT side of the CHASSIS.



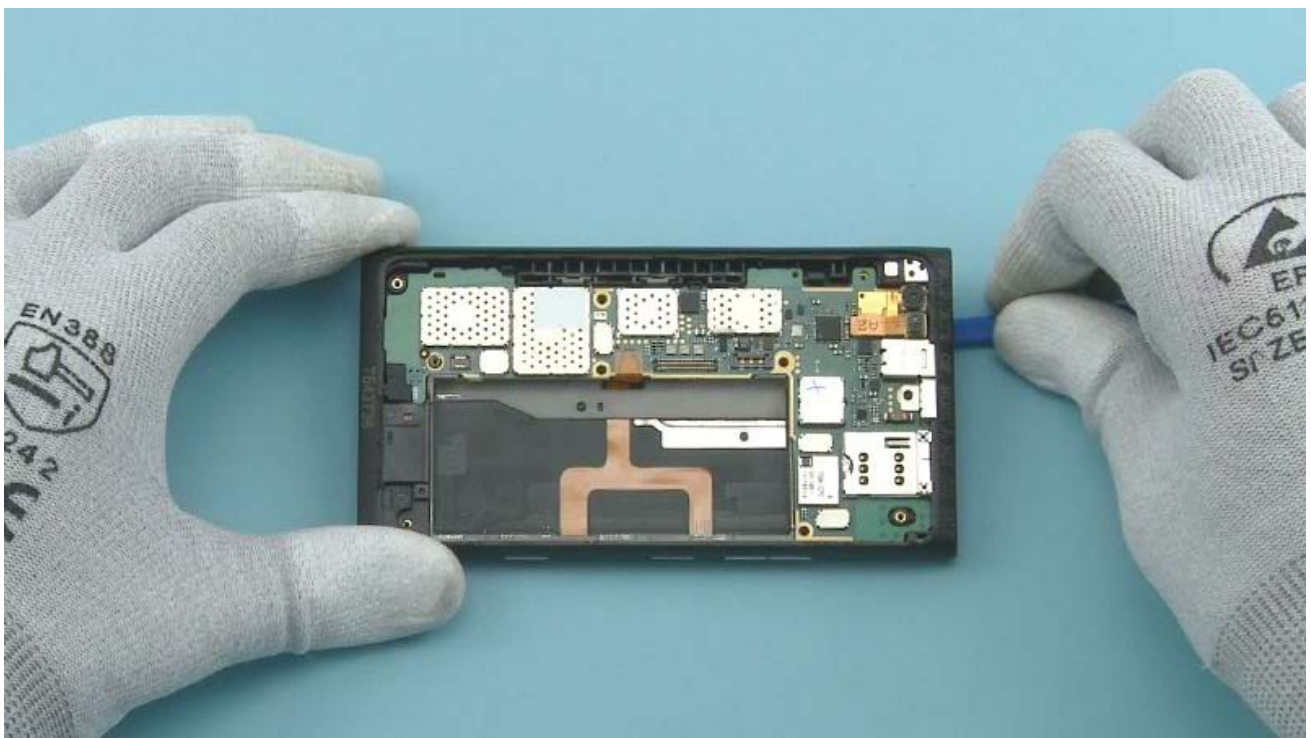
Remove the CHASSIS including the BATTERY.



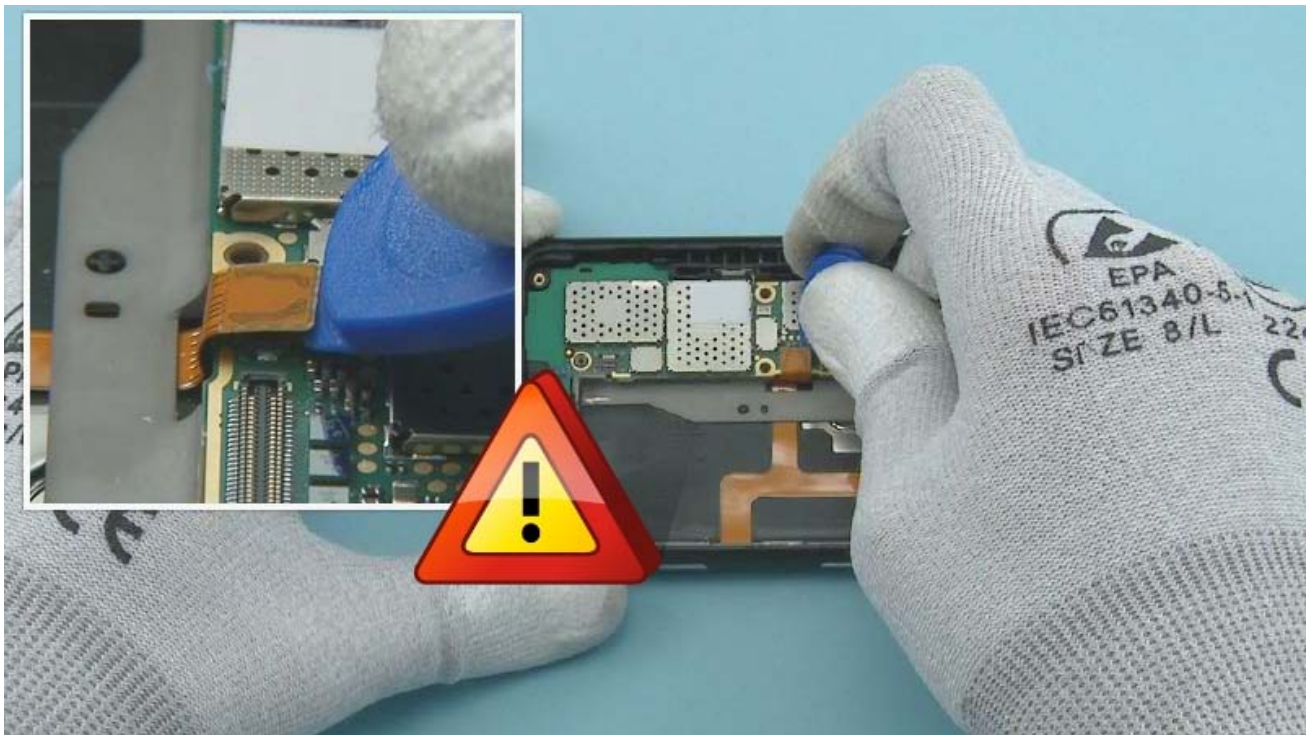
Open the DISPLAY connector and the UI connector with the SRT-6. Be careful not to damage the connectors or any components nearby.



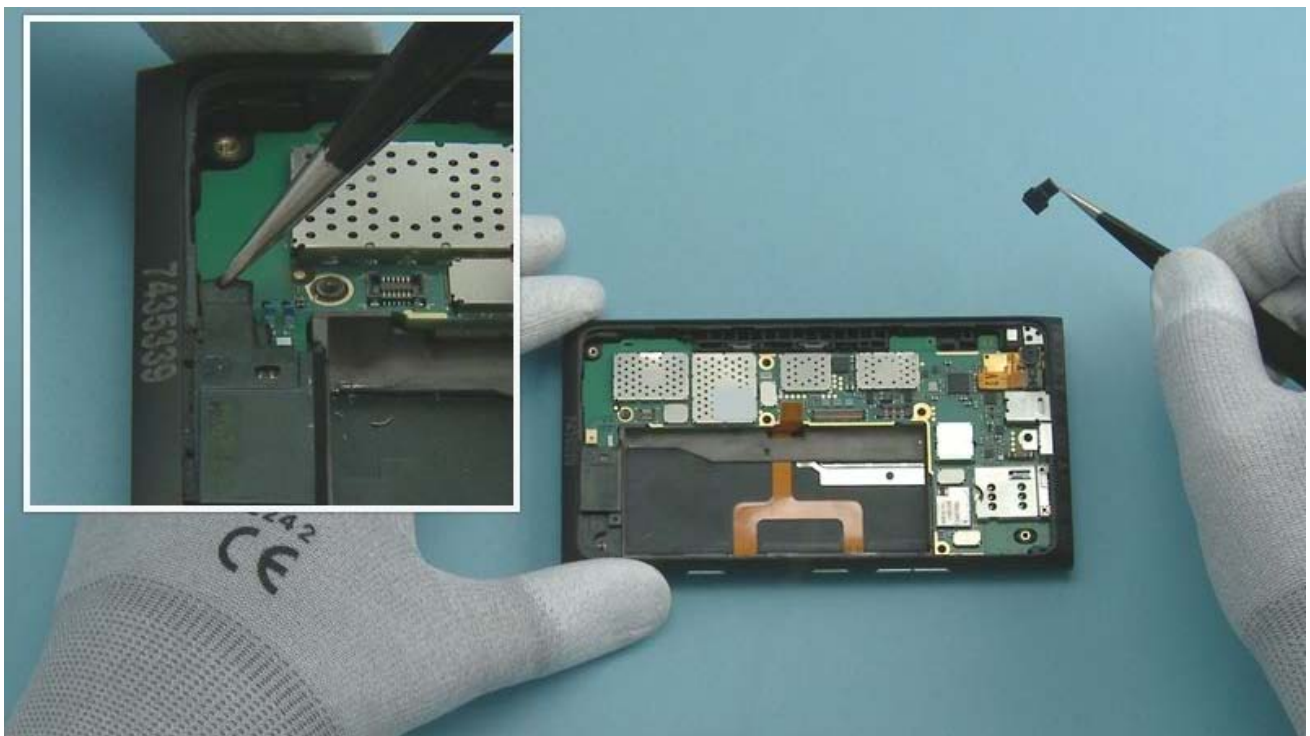
Remove the DISPLAY ASSEMBLY.



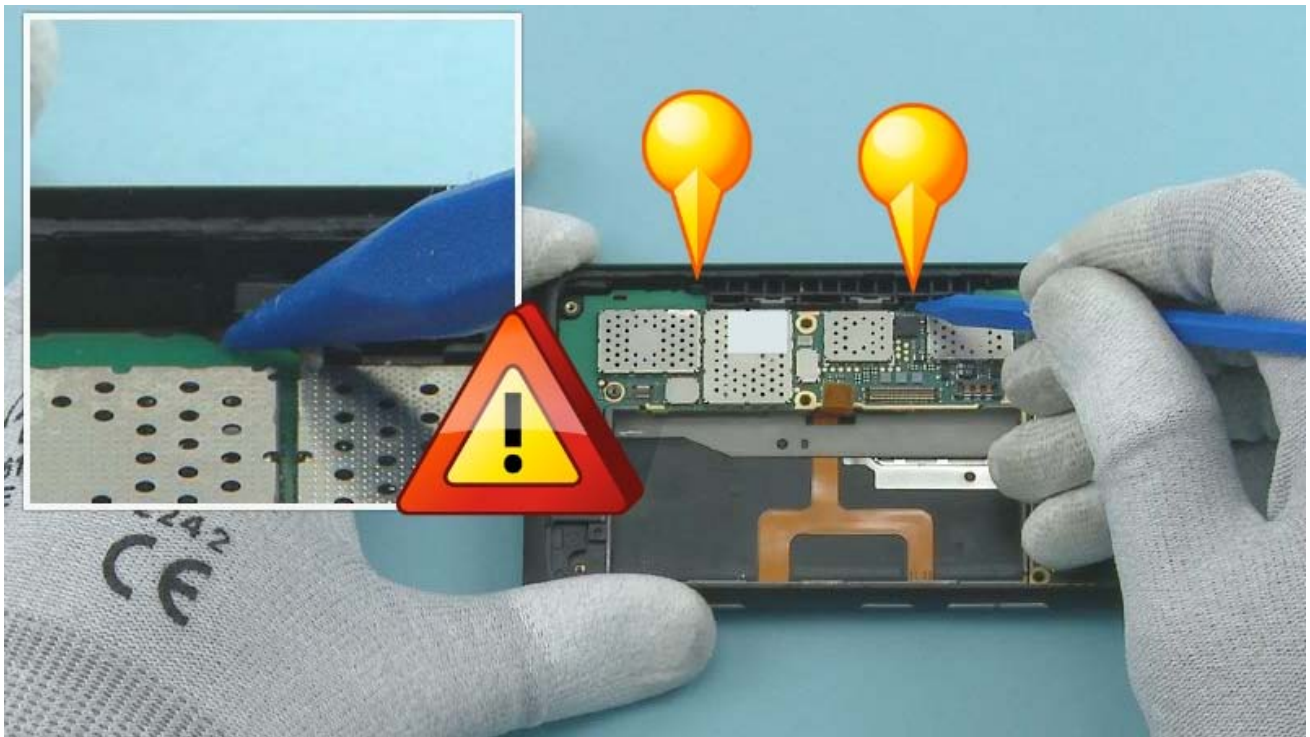
The SS-93 can now be removed.



Open the side key connector with the SRT-6. Be careful not to damage the connectors or any components nearby.



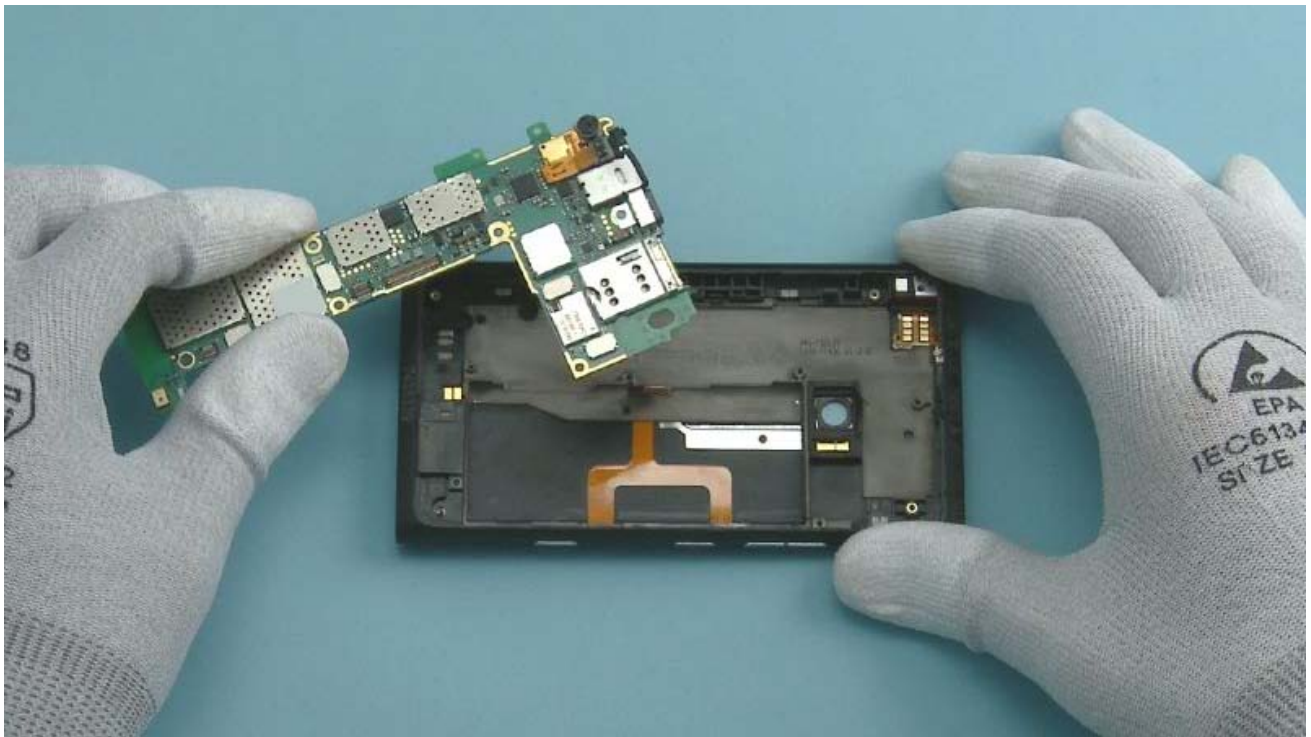
Remove the PRIMARY MICROPHONE BOOT with tweezers.



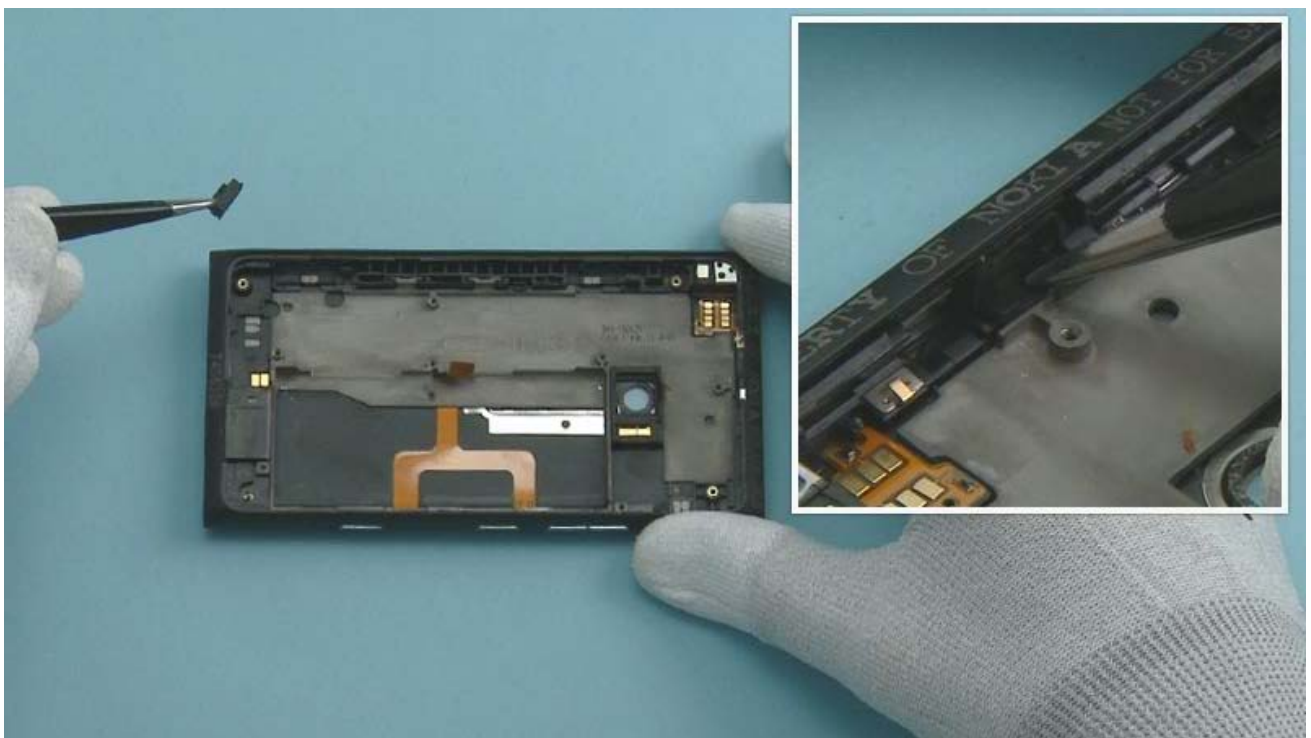
Release the two shown clips holding the ENGINE BOARD with the sharp end of the SS-93. Be careful not to damage any components nearby.



Lift up the ENGINE BOARD from the bottom end first. Then pull the ENGINE BOARD to the direction shown.



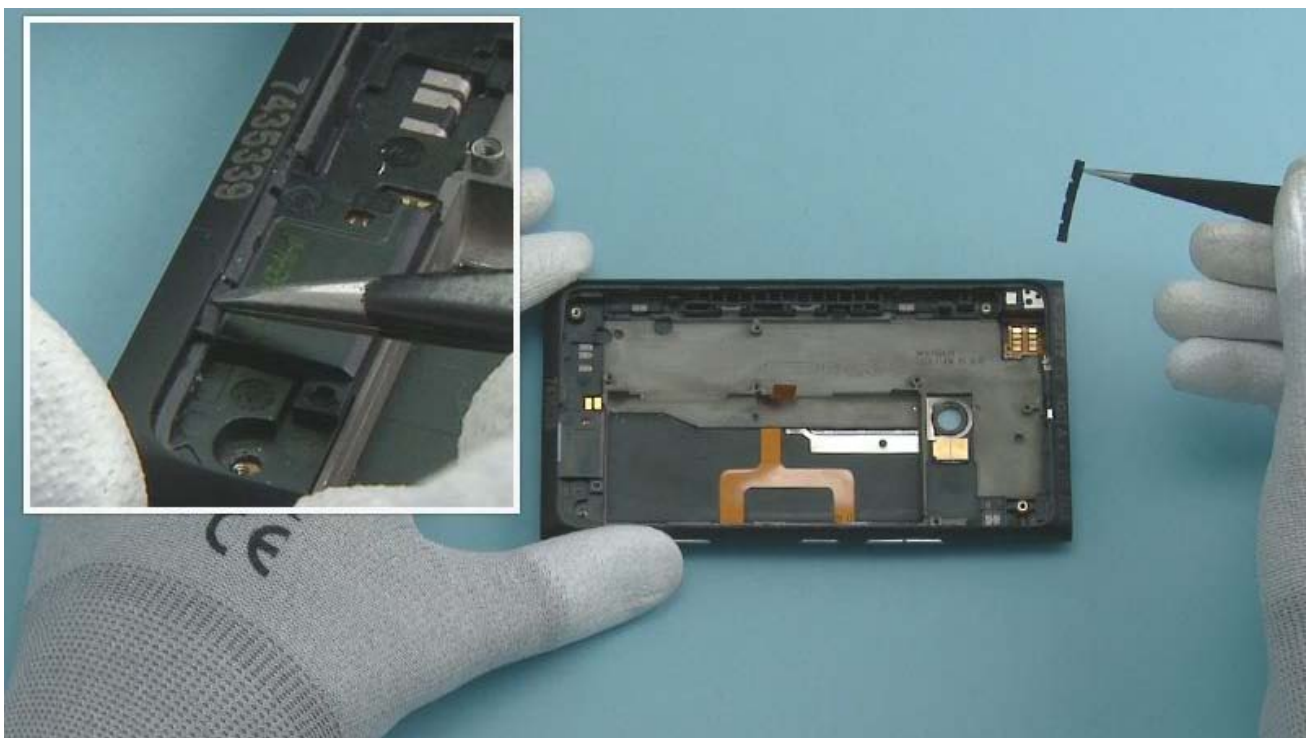
The ENGINE BOARD can now be removed.



Remove the USB BOOT with tweezers.



Remove the CAMERA BOOT with tweezers.



Remove the IHF LID SEAL PLUG with tweezers.



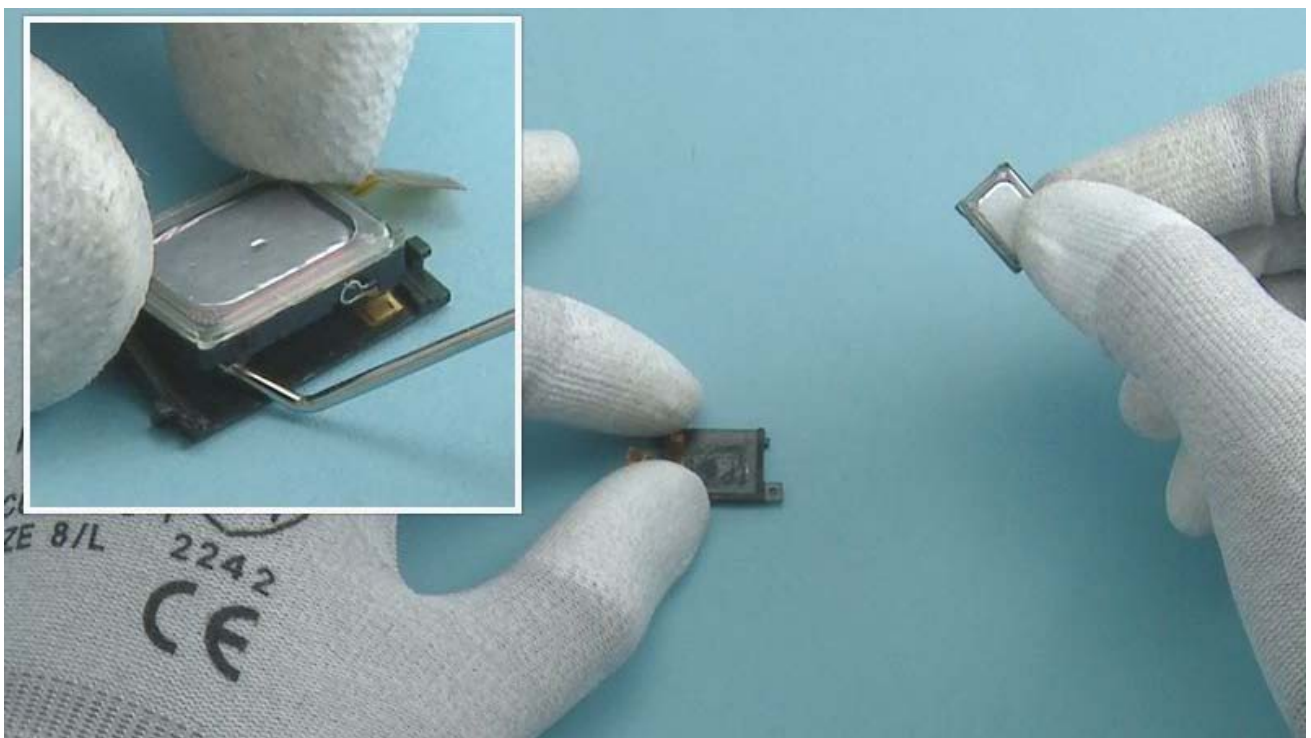
To remove the IHF LID and SPEAKER, first release it with the SS-93.



Then release the IHF SPEAKER flex with the dental tool. Be careful not to injure yourself or damage the flex with the sharp end of the dental tool.



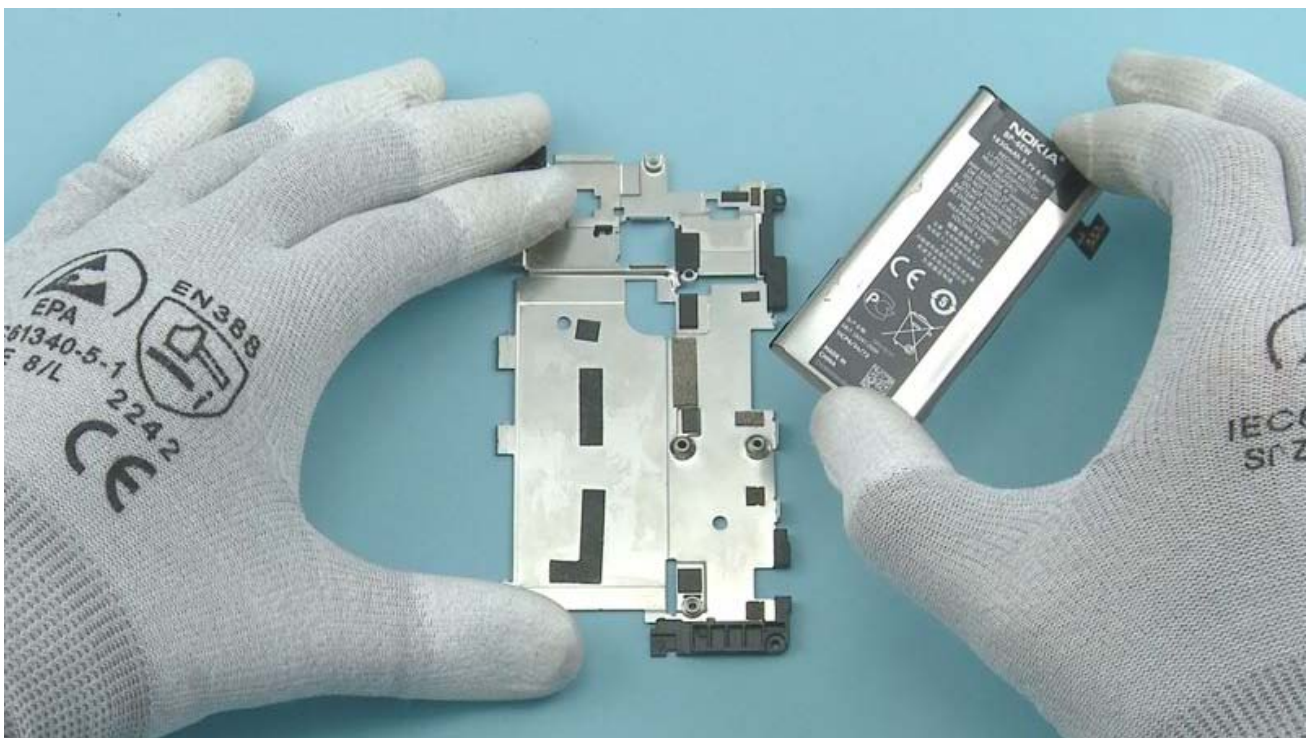
Remove the IHF LID and SPEAKER.



Release the IHF SPEAKER from the IHF LID with the dental tool and remove it.



Release the BATTERY from the CHASSIS with the SS-93.



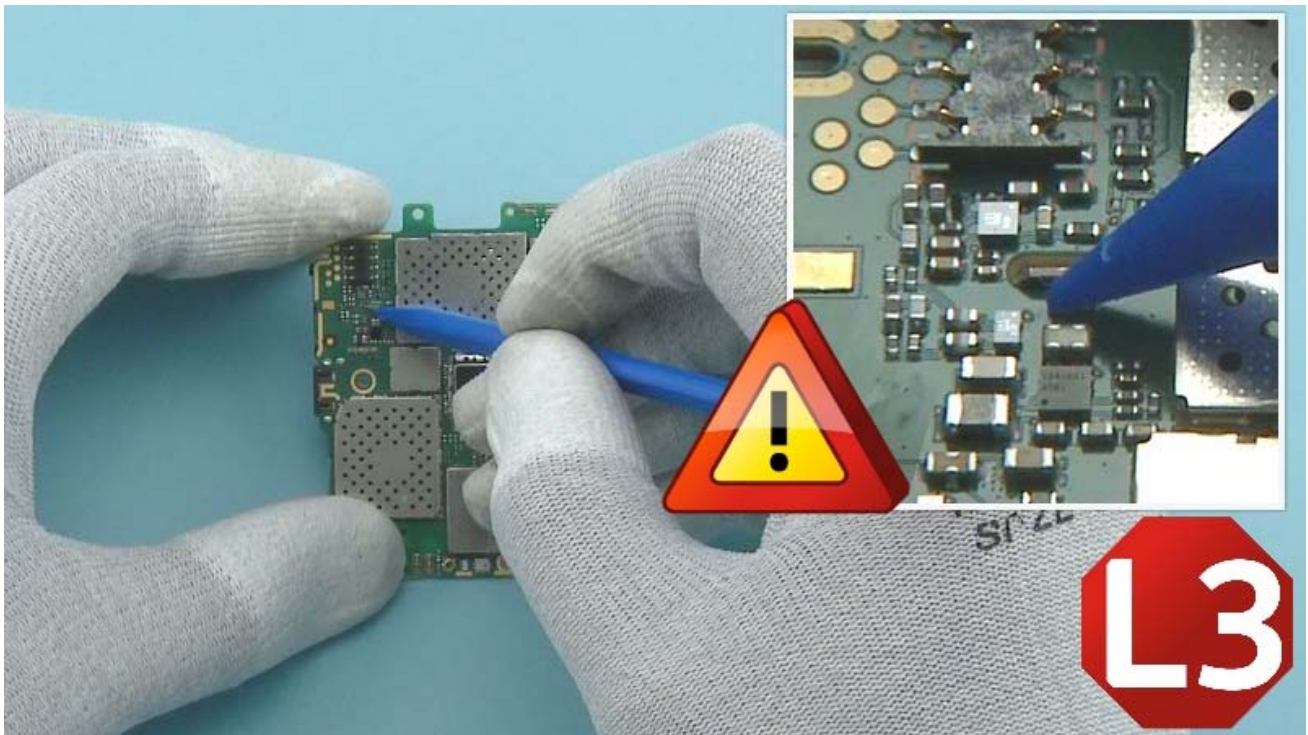
Remove the BATTERY.



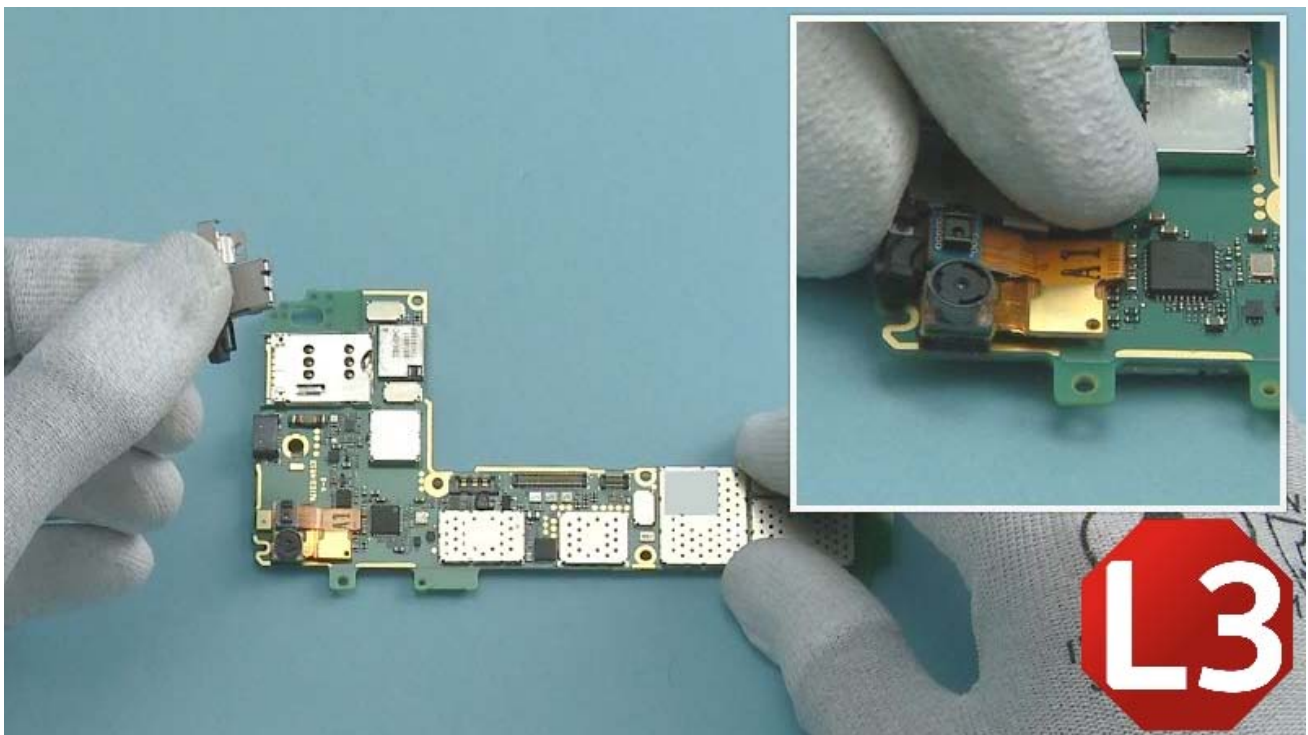
Remove the TOP BATTERY ADHESIVE from the CHASSIS with tweezers. Do not use it again. Discard it.



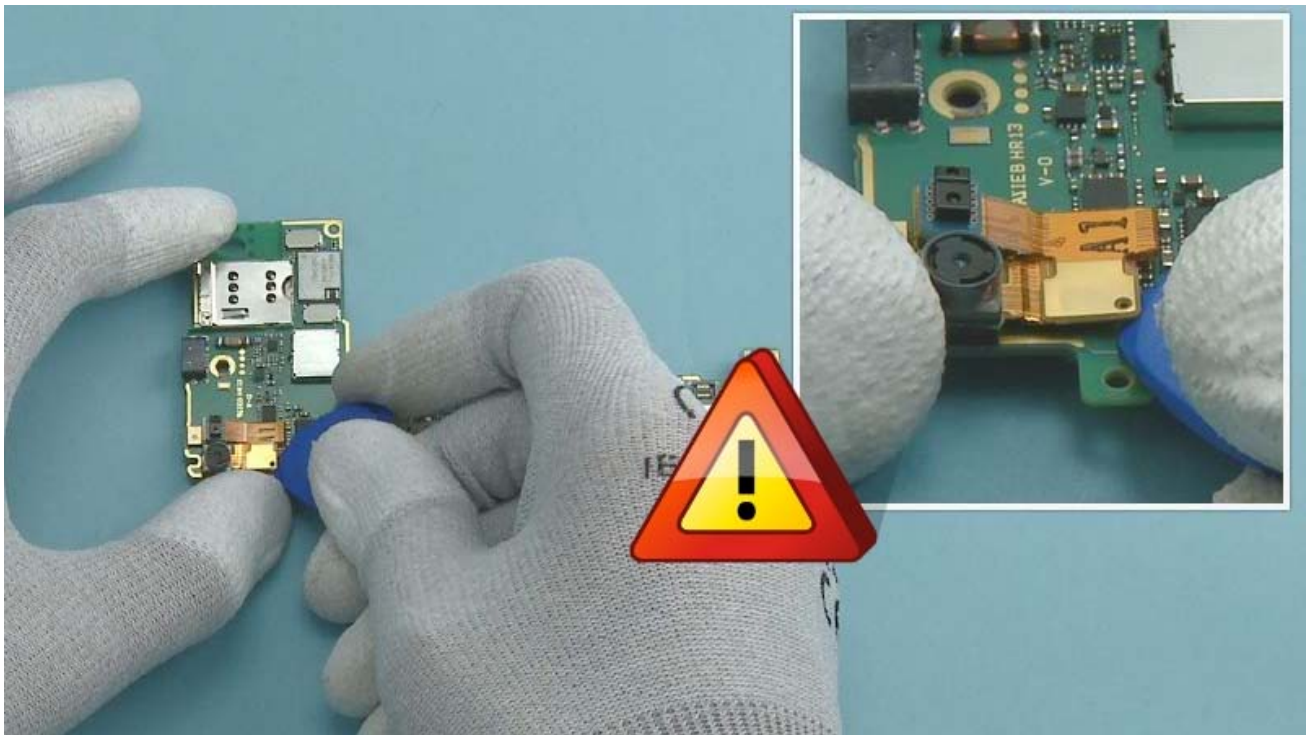
Remove the BATTERY ADHESIVE from the BATTERY with tweezers. Do not use it again. Discard it.



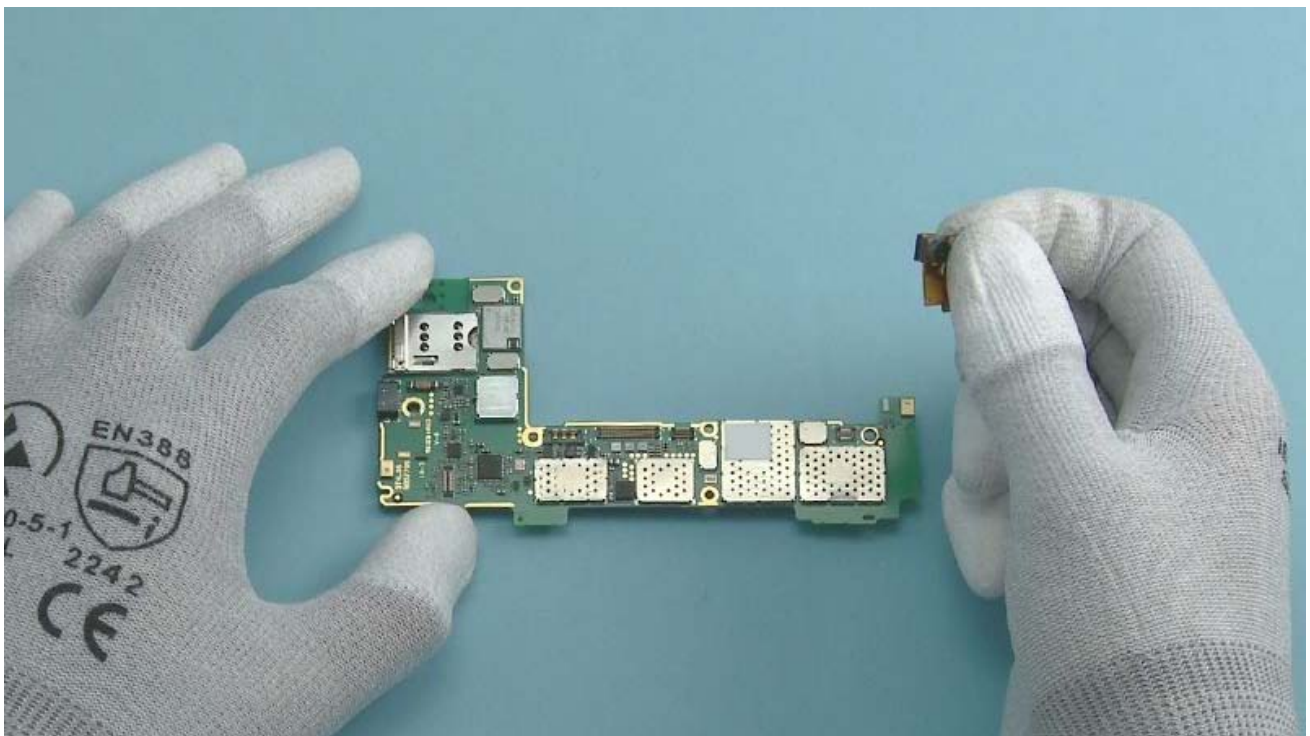
Before removing the EARPIECE and USB HOLDER ASSEMBLY note that it is a level 3 part. Release the clip on the bottom side of the ENGINE BOARD holding the EARPIECE and USB HOLDER ASSEMBLY with the sharp end of the SS-93. Be careful not to damage any components nearby.



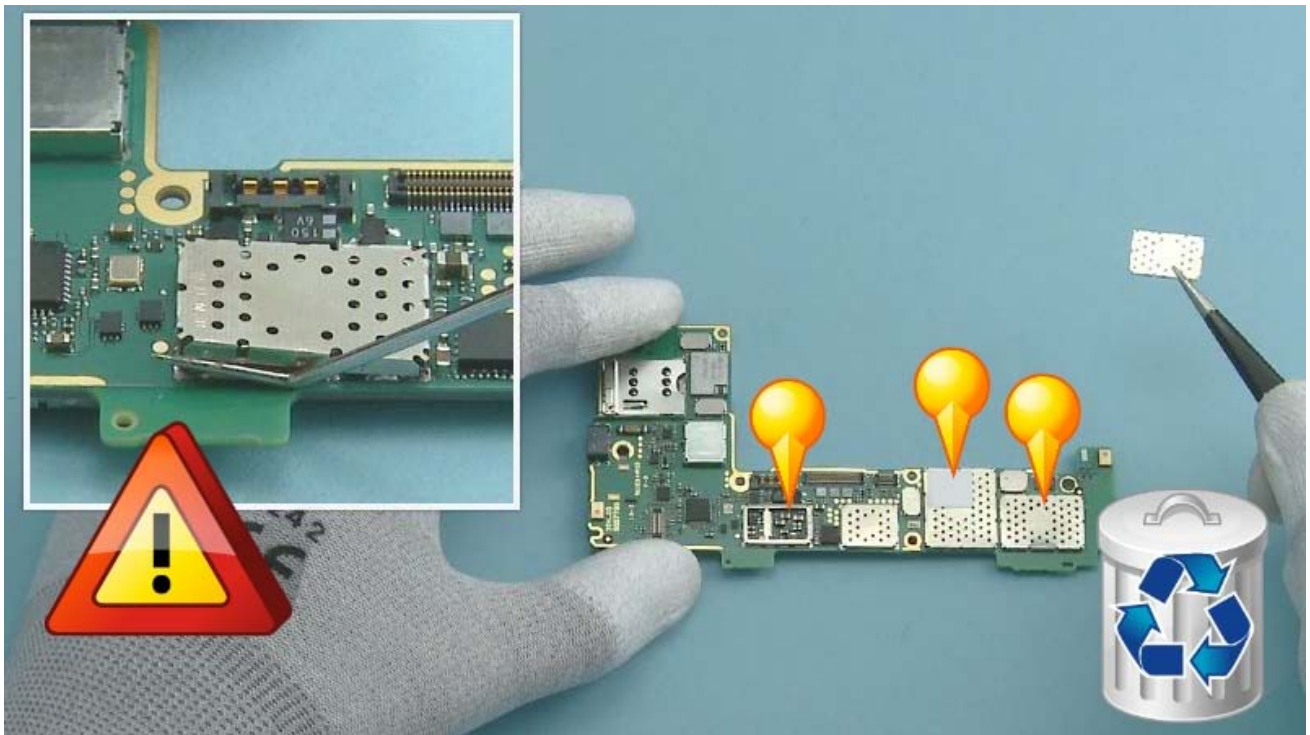
Remove the EARPIECE and USB HOLDER ASSEMBLY.



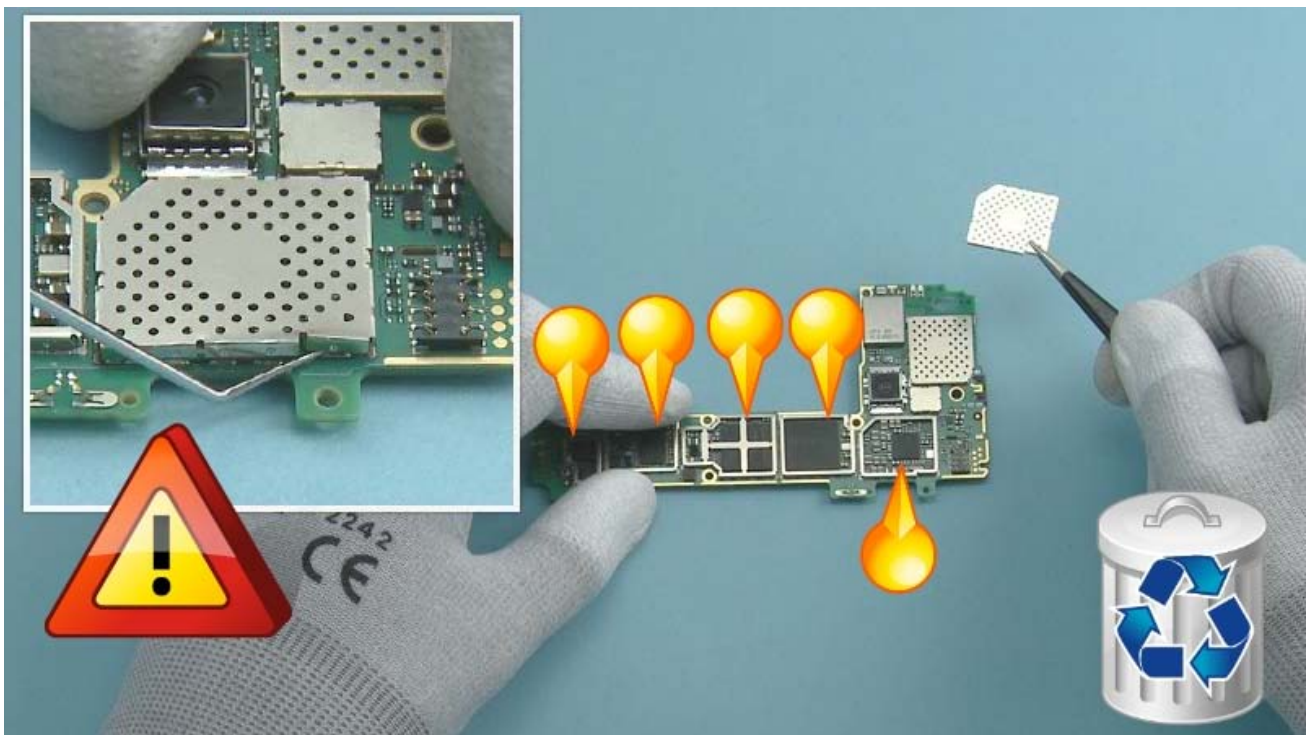
Open the DIPRO CAMERA FLEX connector with the SRT-6. Be careful not to damage the connector or any components nearby.



Remove the DIPRO CAMERA FLEX.



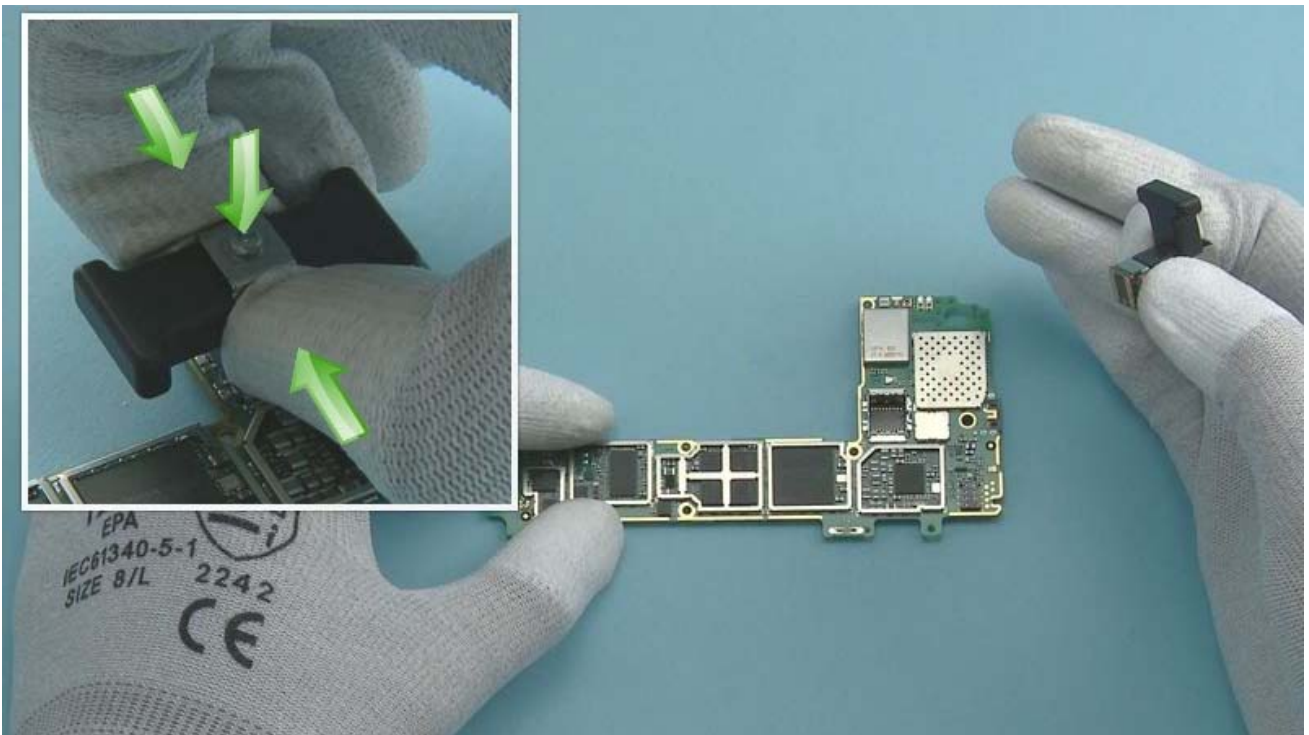
Release the three shown SHIELDING LIDS from the top side of the ENGINE BOARD with the dental tool and remove them with tweezers. Be careful not to damage any components nearby. Do not use them again. Discard them.



Release the five shown SHIELDING LIDS from the bottom side of the ENGINE BOARD with the dental tool and remove them with tweezers. Be careful not to damage any components nearby. Do not use them again. Discard them.



When removing the camera be careful not to damage the two shown springs.

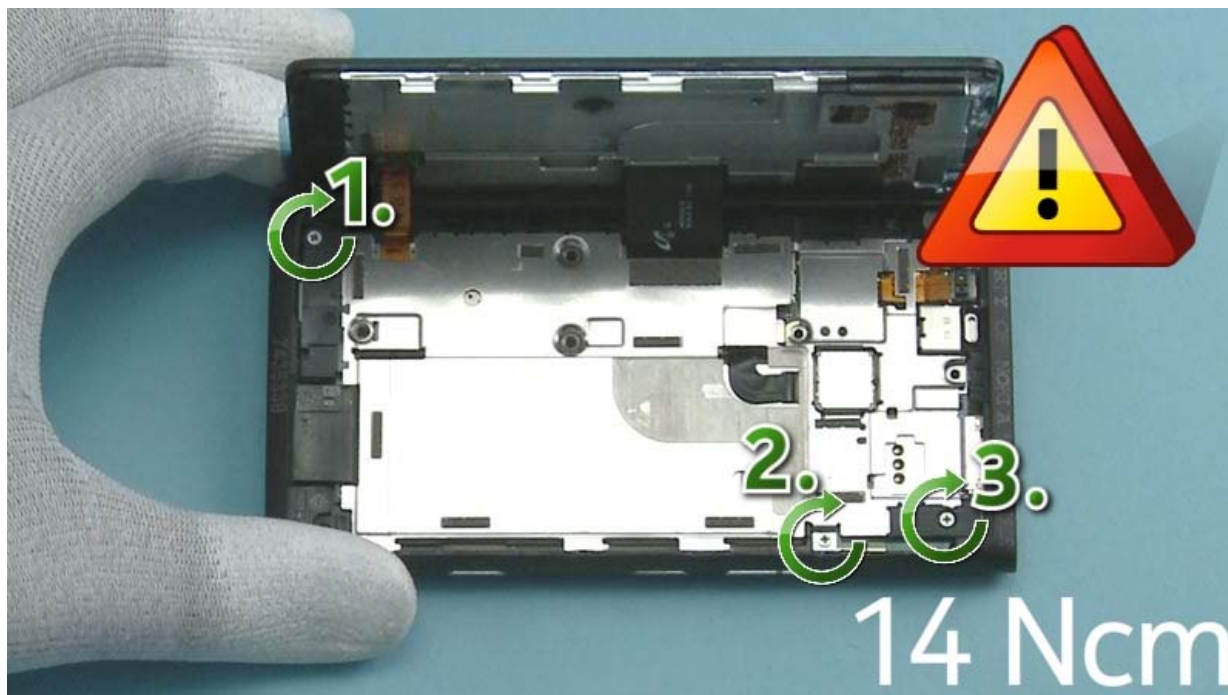


Place the SS-210 on top of the CAMERA and push down the metal sheets to unlock the camera retaining clips. Hold from the shown sides of the SS-210 and lift up to remove the CAMERA.

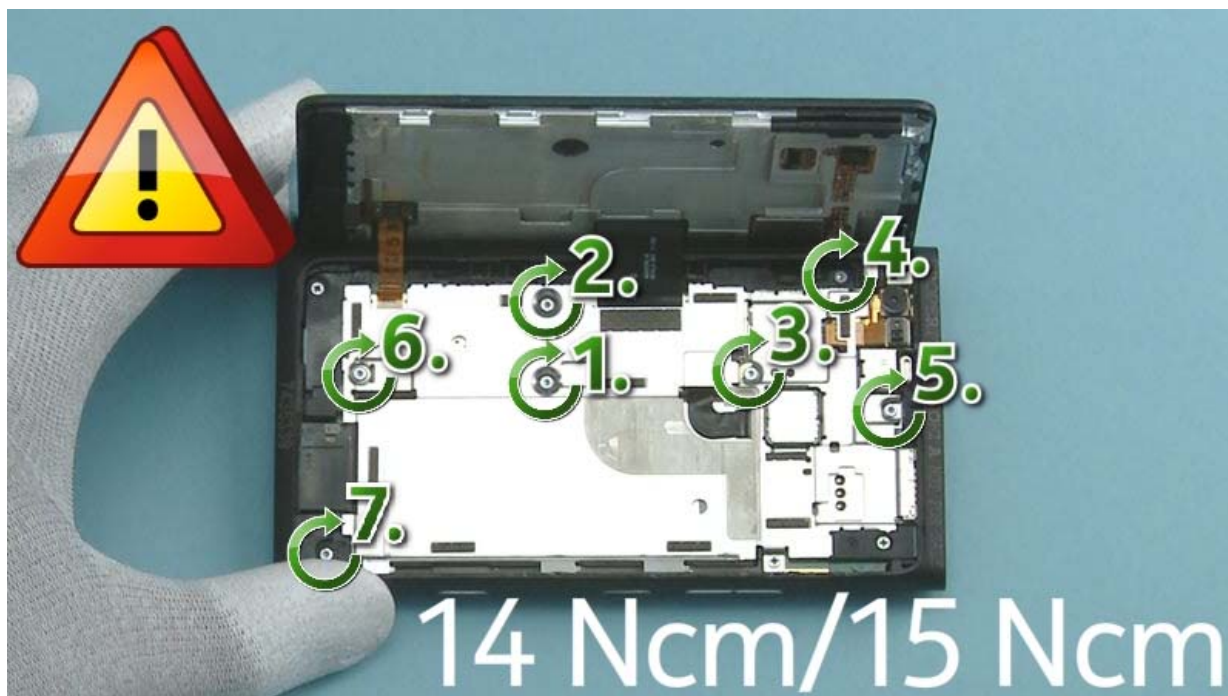


The Nokia Lumia 900 disassembly procedure is complete.

-END OF DISASSEMBLY-



Fasten the three camera cross screws in the order shown to the torque of 14Ncm. Be careful not to over tighten the screws. The screw molds might get damaged.



Fasten the seven TORX+ size 4 screws in the order shown to the torque of 15Ncm. Note that screws 4 and 7 must be tightened to the torque of 14Ncm. Be careful not to over tighten the screws. The screw molds might get damaged.



CA-101 Service cable



AC-16U Travel charger



SS-282 Unibody opening tool



SS-210 Camera removal tool



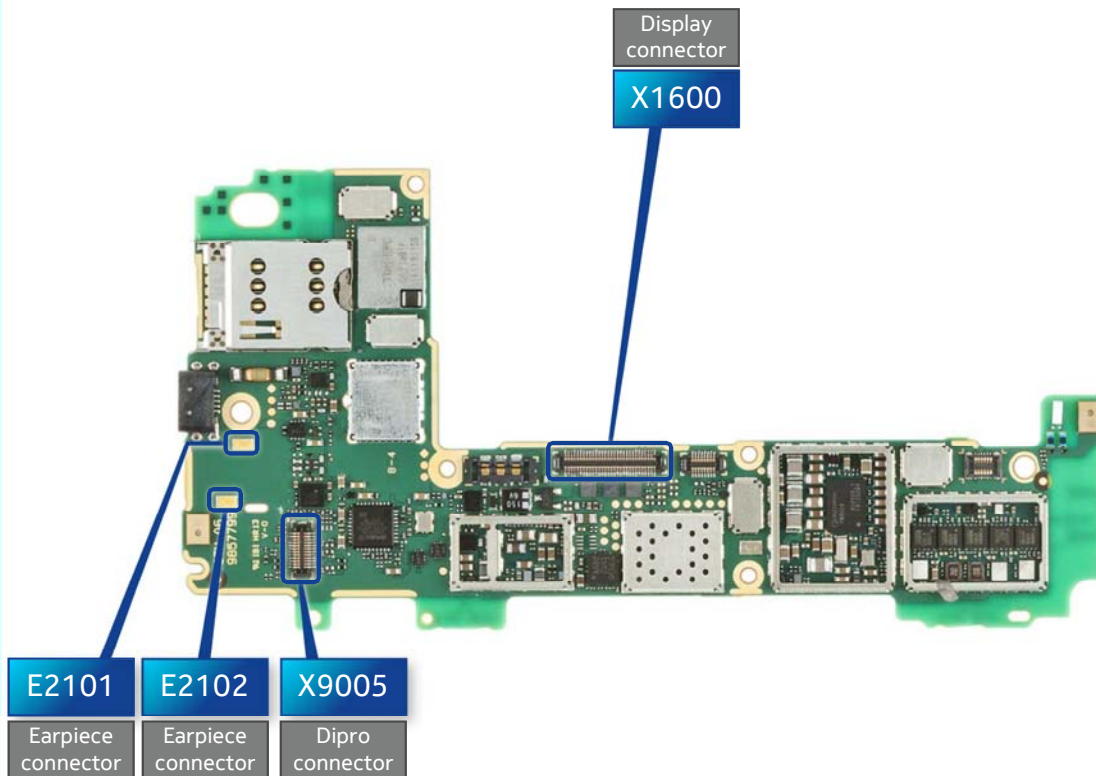
SIM Door key



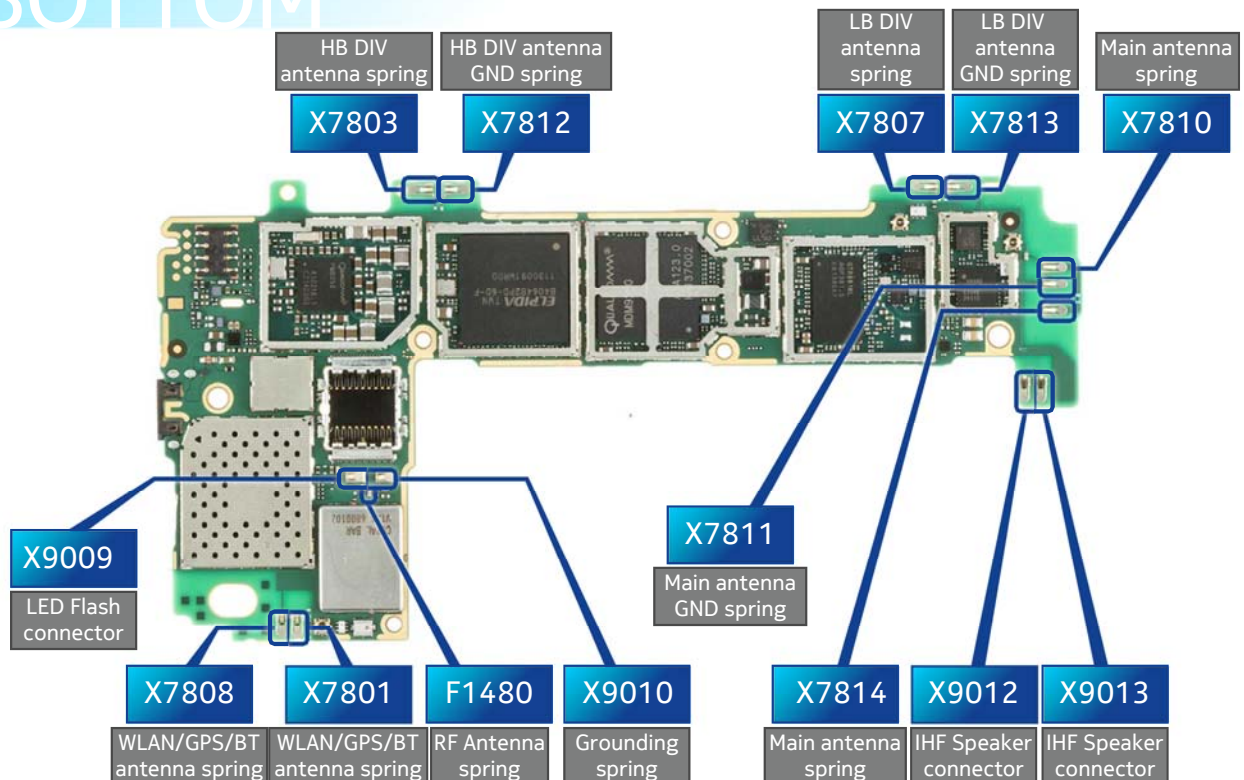
Nokia Standard Toolkit (v2)

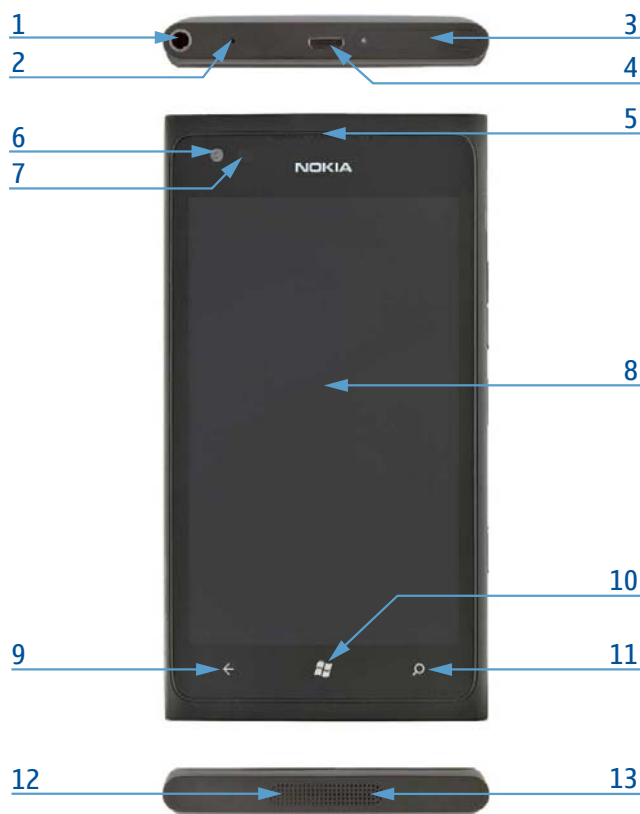
For more information, refer to the Service Bulletin (SB-011) on Nokia Online. Supplier or manufacturer contacts for tool re-order can be found in "Recommended service equipment" document on Nokia Online.

TOP



BOTTOM

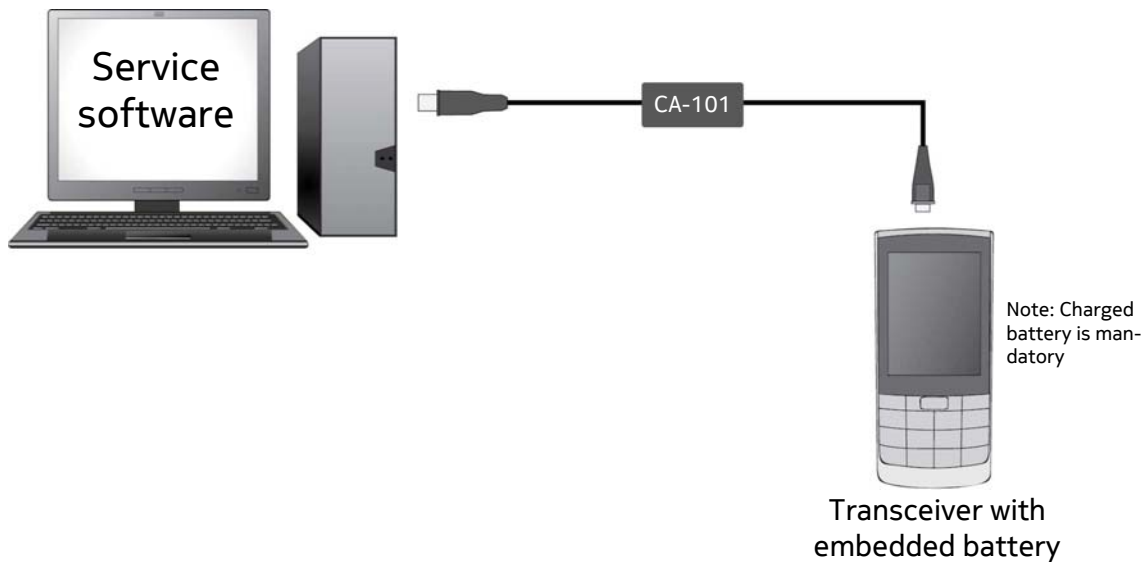




- 1 — Nokia AHJ 3.5 mm connector
- 2 — Secondary microphone
- 3 — SIM card holder
- 4 — Micro USB connector
- 5 — Earpiece
- 6 — Secondary camera
- 7 — Ambient light & Proximity sensors
- 8 — Touch screen
- 9 — Back key
- 10 — Start key
- 11 — Search key
- 12 — Microphone
- 13 — Loudspeaker
- 14 — Camera
- 15 — Camera flash
- 16 — Volume keys
- 17 — Power/Lock key
- 18 — Camera key



Flashing concept



On Device Diagnostics Tool (ODDT)

The ODDT is an app for performing basic device hardware troubleshooting at Nokia Care Points. The ODDT is not visible on retail phones and it is intended only for use by trained personnel at Nokia Care Points.

To install the ODDT:

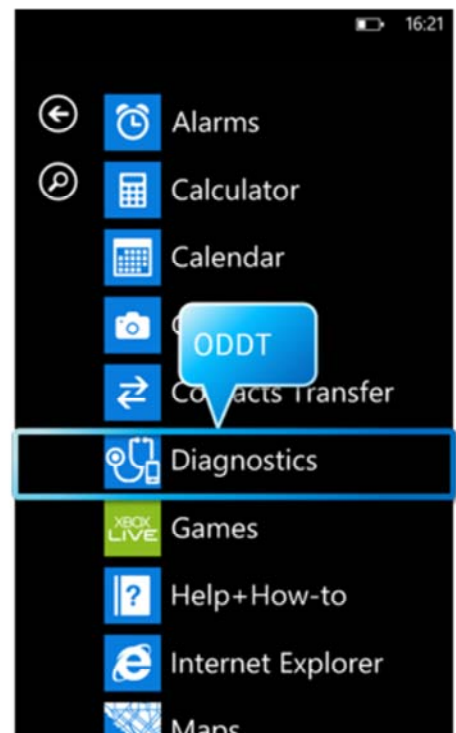
1. Enter ##634# on the on-screen keypad
2. Diagnostics app appears in Apps list

To remove the ODDT:

1. Tap and hold Diagnostics
2. Tap uninstall

Note: always uninstall the tool before returning the phone to the consumer!

For more information on using the ODDT, see KICS TR2816.



Hardware reset

If the phone hardware is jammed, you should first recommend that the consumer performs a hardware reset. The hardware reset does not reset the Windows Live ID or remove any consumer data. Because the consumer cannot remove the battery to reset the phone the phone has a special electronic circuit which cuts the phone power when the power key is pressed for 10 seconds.

To perform the hardware reset press the Power key and hold it for 10 seconds. The phone screen will turn black (phone is off). Then press the Power key to turn on the phone.

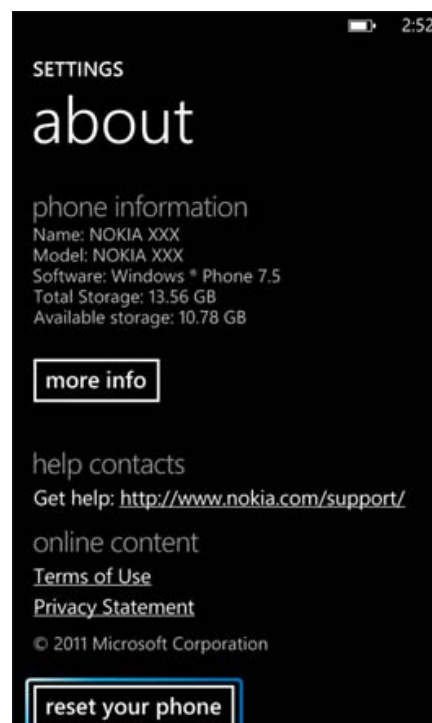


Software / operating system (OS) reset

The software / operating system (OS) reset returns the phone to its out-of-the-box state. Note that this procedure erases all consumer data! Always first try to perform a hardware reset.

Option 1: About menu

- Use this option if the consumer knows the lock code
- This option warns the consumer about data loss!
- Tap Settings > About > reset your phone



Option 2: Hardware key combination

- Use this option if the phone is locked and the consumer does not know the code
- Note: no warning about data loss!
- Do not advertise this feature to consumers!

Follow next steps to perform OS reset with phone keys.

Step 1

Make sure the phone is turned Off. Press and hold the Volume down, Power and Camera keys



Step 2

When the phone vibrates release the Power key



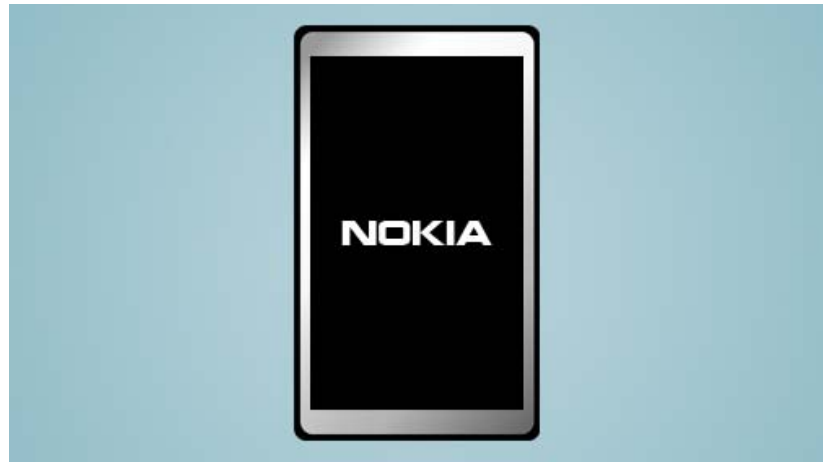
Step 3

Keep holding the Volume down and Camera keys for another 5 seconds and then release the keys



Step 4

The phone will reset and boot up automatically



Version	Date	Description
1.0	01.03.2012	First published version